REPORT OF THE COMMISSION OF PHYSICIANS APPOINTED TO EXAMINE THE REQUIREMENTS FOR ADMISSION TO THE ARMY, NAVY, AND MARINE CORPS

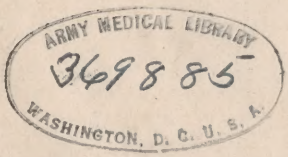
MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES

TRANSMITTING

THE REPORT OF THE COMMISSION OF PHYSICIANS APPOINTED TO EXAMINE THE REQUIREMENTS FOR ADMISSION TO THE ARMY, NAVY, AND MARINE CORPS



FEBRUARY 29, 1944.—Referred to the Committee on Military Affairs and ordered to be printed

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MESSAGE FROM THE PRESIDENT

To the Congress of the United States:

I am sending herewith for the information of the Congress the report of the Commission of Physicians appointed to examine the requirements of admission to the Army, Navy, and Marine Corps.

In addition to this report there are three rather voluminous appendixes. These, of course, should be made available to Senators and Representatives and any other person wishing to obtain the information there.

I think that this report and these studies will be of definite interest to all.

FRANKLIN D. ROOSEVELT.

THE WHITE HOUSE, *February 29, 1944.*

REPORT OF THE COMMISSION OF PHYSICIANS APPOINTED TO EXAMINE THE REQUIREMENTS FOR ADMISSION TO THE ARMY, NAVY, AND MARINE CORPS

To the PRESIDENT:

The Commission of physicians, appointed pursuant to Public Law 197 of the Seventy-eighth Congress, convened January 6, 1944. The law assigned the Commission the duty of examining the physical, mental, and moral requirements for admission to the Army, Navy, and Marine Corps, and of recommending any changes therein, especially the establishment of special standards for men to be inducted for limited service which might be made without impairing the efficiency of the armed forces and have the effect of delaying as long as possible the induction of men living with their families. The Commission obtained factual data, comments, and opinions regarding numbers of men potentially available for induction, the numerical needs of the armed services for manpower, the rates and causes for rejection under the present requirements for admission, the types of duty for which men are needed by the armed services, and the possible effect of the current requirements for admission on claims for post-service benefits from appropriate civilian and military agencies of the Government and examined the requirements for admission to the Army, Navy, and Marine Corps in the light of this information.

The Director of the Selective Service System discussed the numbers of men potentially available for induction, the rates and causes for rejection under the current requirements for admission to the armed services, and similar pertinent matters, in substance as follows:

Distribution of registrants, ages 18–37, as of Dec. 1, 1943

Total living registrants	22,138,000
In the armed forces:	
Inducted	6,540,000
Enlisted	2,430,000
Disqualified after physical examination	3,357,000
In process of classification, examination, or induction	1,090,000
Deferred:	
Occupational reasons	3,834,000
Dependency reasons	4,645,000
Other reasons	152,000
Unclassified and unknown	90,000

The group in the foregoing table shown as "In process of classification, examination, or induction" includes 43,000 men who have been found qualified for induction for limited service under present requirements but whose services have not been required by the armed forces in this status.

In addition to the men listed above, approximately 1,200,000 men reach age 18 each year. It can be expected that 240,000 of these will have entered one of the three services prior to their eighteenth birthday by voluntary enlistment in classifications which require a higher de-

gree of physical fitness than is required for induction for general service. As a result, the best material in this group physically does not appear for induction. Of those who do not enlist about 156,000 enter agriculture, and from the remainder not more than 600,000 can be counted on for induction, since the rejection rate has been 25 percent.

For some months past approximately 6 percent of registrants classified as available for induction have been rejected as unfit by the local boards and, of the approximately 375,000 per month delivered to induction stations, over 40 percent have been rejected after examination. An increase in these rejection rates can be expected as men in older age groups, men living with their families, are called up for induction.

The leading principal causes for rejection of those in class IV–F have been mental disease, educational deficiency, syphilis, musculoskeletal conditions, and cardiovascular defects which together have accounted for approximately half of the registrants currently in class IV–F.

A recent study on selected cardiovascular rejectees in five cities revealed that approximately 17 percent of those registrants who were reexamined were qualified for general military service as defined by Army physical standards. It is estimated that perhaps 6 to 8 percent of all registrants currently in class IV–F would be found qualified for general service should a review of the whole IV–F group be undertaken. A program for a complete review has been formulated but has been held in abeyance pending the report of this Commission. In general, it provides for review of the folder of each of these men by his local board, review by the examining physician with final action if the disqualification is obvious, reference to medical advisory boards if necessary in doubtful cases, and delivery to the induction stations of only those men who seem likely to be accepted.

The Assistant Chief of Staff, G–1, discussed the numerical needs of the Army for manpower and the types of duty for which these men are required, in substance as follows:

The total authorized strength of the Army is 7,700,000 individuals. As of December 31, 1943, there were 7,482,000, a deficit of 218,000. Part of this deficit was caused by the fact that in the last 4 months of 1943 alone, inductions fell 211,000 (31 percent) short of planned call of 675,000. After the Army reaches its authorized strength, there will be a continuing need for from 75,000 to 100,000 men per month to replace losses, and the majority of these men must be qualified for combat service.

Under the present standards for general service the quality of the men is lower than is desirable, but this situation has been met by careful attention to personnel assignment. Even so, during the period from Pearl Harbor to October 31, 1943, 474,000 enlisted men were discharged from the Army because of physical or mental reasons. Of these approximately 300,000 were discharged on certificate of disability for discharge, the rest being discharged for inability to measure up to required Army standards. Samples of those discharged on certificate of disability for discharge show 40 percent were discharged during the first 6 months of service, 40 percent during the second 6 months, and 20 percent after a year or more of service. Other statistical analysis shows that of those discharged on certificate of disability for discharge during the second quarter of the year 1943, 44.6 percent were discharged because of neuropsychiatric disabilities.

These discharges are largely from combat organizations, and the men required by the Army as replacements from now on should be of the best possible physical caliber since they will all be potentially front-line troops. Not more than 10 percent of the strength of the Army can be composed of men who meet only the present standards for limited service. At the present time there are already more than 500,000 men in the Army in this category. Not more than 300,000 limited-service men can be profitably used in the service commands in this country and the remainder must be used in headquarters and similar installations overseas. During the period of expansion of the Army as many as 20 percent of the men offered for induction were taken under the qualifications for limited service, but at the present time only 5 percent are being taken in this status, and this should not be increased.

Until recently the Army's effort in this country has been directed to mobilizing and training new organizations for combat service. These organizations are now completing their training and are moving overseas. During the training period it was necessary to maintain many camps and posts and a considerable number of limited-service men were used for clerical, upkeep, and other overhead duties. As the trained organizations move on and these stations are put into a stand-by status, many of these limited-service men must be moved to new assignments. In the face of the decreasing number of assignments available for these men in the Army in this country, there is a steadily increasing number of men already in the Army who through injury or incidents of active operations become unfit for general service but who are able to render valuable service in a limited-service status. Such men are far more valuable to the Army because of their training and experience than are men newly inducted from civil life, and there seems to be a moral obligation to permit them to continue to serve. Since the Army is limited in its total strength, induction of men from civil life in number sufficient to fill all the places available for men qualified only for limited duty might necessitate the discharge of these service casualties.

The Army has recently announced a policy of returning men who have served overseas for long periods to the United States for duty when practical. This policy cannot be effected unless there are places in which men can be profitably employed. This would not be the case were all possible assignments in the United States filled by men physically fit for only limited duty.

The Army has been aware of the potential manpower that exists in the group who have been rejected for educational deficiency. Tests have been placed in use by which men, who have native intelligence and ability to learn but who have not had the benefit of formal education, may be separated from those whose educational deficiency reflects inability to learn.

The Army has accepted men who have the ability to learn and has established special training centers to which they are assigned. In these camps the men are taught to read and write up to the average fourth-grade level. This degree of education is necessary for the man to complete basic military training and is completed before the man is started on his basic training. Thus the length of time required to fit one of these men for actual service is increased over the time required to bring the literate recruit to the same stage of military train-

ing by the amount of time spent in his education. The maximum time required for the educational effort is 12 weeks. Since last June 75,000 illiterate men have been accepted by the Army. Of this number 58 percent have successfully completed the educational course and have been graduated into basic training for general service; 8 percent have been discharged; and 34 percent are at present under training. Illiterates must be carefully selected for educational training, however, since the incidence of physical defects is high in this group.

The Assistant Chief of Staff, G–1, concluded by stating that, in view of—

(*a*) Present large losses from physical defects.
(*b*) The small number of remaining limited-service positions to be filled.
(*c*) The necessity for high-grade combat replacements from now on.
(*d*) The time loss in taking in too many illiterates.

that the present physical standards could not be lowered without impairing the efficiency of the Army.

The Chief of Naval Personnel discussed the numerical needs of the Navy and the types of duty for which these men are required, in substance as follows:

The Navy has not reached its maximum requirements for manpower, and estimates as to total future needs must be tentative since the need of the Navy for men is in direct relation to the shipbuilding program.

Since December 7, 1941, the Navy has progressively been forced to acquiesce in lowered physical standards in order to obtain the numbers of men it requires from the decreasing manpower pool. The Navy has always insisted, however, that, granting it a high priority both as to quantity and quality of the manpower resources available to the armed forces, constitutes the most effective measure to shorten the war. The peculiar conditions and requirements of naval life at sea will always make it imperative that personnel be of the highest physical qualifications available. Living conditions on board ship are totally different from on shore and necessitate a higher degree of physical fitness if efficiency is to be maintained during extended periods of sea duty. In addition to being able to withstand the rigors of seagoing life, naval personnel must not be unduly handicapped in the event they become separated from facilities for medical attention, as may occur in any type of sea duty.

Crews of combat vessels must be versatile not only in their ability to perform their ordinary and routine daily task but also in their ability to perform combat duties under conditions requiring a high degree of coordination and teamwork. Regardless of their regularly assigned duties, all men aboard ship are potential combat personnel under battle conditions. It may be that particular jobs at sea can be performed temporarily by men of lesser physical qualifications, but since the final and ultimate test must be made under battle conditions which will require the highest performance attainable by physically qualified men, the daily needs must be fixed by the requirements of a few brief moments. Anything short of perfect performance cannot be tolerated at such a time. Failure to be constantly mindful of this may entrust crews of combat vessels to the uncertain performance of individuals whose performance in an emergency is limited by physical

handicaps. The existing requirements for admission to the Navy cannot be lowered without impairing efficiency.

Much thought has been given to the increased use in the Navy of men of physical qualifications comparable to those for limited service. It is freely admitted that in the shore establishment of the Navy in the continental United States many of the billets are of such a nature that no undue physical hardships are involved. Routine is less severe than on board ship, and regular medical attention is always available. If no other considerations were involved, these billets could be filled by men of lowered physical standards, but the Navy is limited in its authorized strength, and all such limitations on total numbers presuppose a high degree of flexibility in assignment between shore and sea duty. Of the enlisted personnel ashore at the present time, approximately 58 percent are qualified for general service, the majority of these being men in training for duty aboard ships now building. It is estimated that when the present contemplated strength of the Navy is reached, there will not be more than 23 percent of the enlisted personnel of the shore establishment qualified for sea duty. The Navy's program for rotation of its personnel between sea and shore duty imposes definite limitations upon the possibilities of using men qualified only for limited service in these billets. It is necessary that men who have served at sea for extended periods be relieved from time to time and given duty ashore, not because they are not physically fit to continue at sea but in order to give them a respite from the harassing conditions of present-day operations in combat areas and to prevent deterioration in their physical and mental vigor.

It is the policy of the Navy to retain in the service personnel who, as the result of incidents of the service, are physically qualified for only limited duty. It is probable that the number of men in this status will increase as the war progresses, and places within the authorized strength of the Navy must be available for them. These men are considered of far more value to the Navy because of their training and experience than would be men of the same physical qualifications inducted from civil life.

The construction battalions (Seabees) do not afford a place where men qualified for limited service could be used at the present time. During the mobilization of these battalions, large numbers of men skilled in the various trades were accepted who, because of age or physical condition, were not qualified for service in the Navy afloat. These battalions have now reached their authorized strength. Their needs in the future will be for replacements for attrition, and it is not anticipated that this number will be of significance.

The Navy has recognized the necessity of eliminating as early as possible those recruits who could be reasonably expected to become neurospychiatric causalties under the rigorous conditions of combat service and has established a procedure for psychiatric screening of recruits during their first days at the naval training stations while they are undergoing basic training. This screening procedure has been in operation since the early days of mobilization. Even with the psychiatric examination at the induction stations followed by this screening procedure mistakes of exclusion and inclusion will occur in individual cases. It is believed, however, that the early elimination of prospective neuropsychiatric casualties saves valuable time and money for the Navy and restores the individuals to civilian status where they can be utilized in the war effort. At the present time discharges for

physical disability constitute 69.9 percent of the total monthly discharges from the service. Discharges for neuropsychiatric disabilities constitute 30.1 percent of the total, and 46.0 percent of these are among individuals during their first 6 months of service. In addition to these discharges, 3.5 percent of all recruits received at naval training stations are discharged as a result of the reexamination procedure.

The Navy is accepting men whose education is below the fourth-grade level and is providing special training for them. Literacy training in which they are taught the elements of reading and writing in order that they may be able to discharge their duties in the Navy is conducted in conjunction with the recruit training. There are very few jobs in the Navy which can be filled by a complete illiterate, and it has been necessary to provide educational training for these men at the expense of purely naval training in order that their services may be utilized. The majority of illiterates are anxious to overcome their handicaps, and the educational program gives promise of considerable success. The fact, however, that additional time and personnel are required for the training of these individuals and the probability that they could not be used for other than the most elemental tasks leads to the belief that an extensive program for education of illiterates after induction into the Navy would not be profitable.

The Administrator of Veterans' Affairs discussed the possible effects of the current requirements for admission on claims for post-service benefits, in substance as follows:

Hospitalization of veterans of present war, authorized by the Veterans' Administration, December 1941 through Nov. 30, 1943

	Admissions	Total	Average hospital days
Total admissions,[1] all causes	35,681		
Total discharges [2]		25,512	34.1
Service-connected:			
Pulmonary tuberculosis		2,198	103.8
Neuropsychiatric		2,185	56.9
Psychotic		1,575	64.8
Other		610	36.4
General medical and surgical		2,370	34.9
Total service-connected		6,753	64.4
Non-service-connected:			
Pulmonary tuberculosis		694	38.8
Neuropsychiatric		4,572	27.9
Psychotic		1,596	34.1
Other		2,976	24.6
General medical and surgical		13,493	20.7
Total non-service-connected		18,759	23.1
Total remaining,[3] Nov. 30, 1943	9,588		
Hospital:			
Pulmonary tuberculosis	2,007		
Neuropsychiatric	4,591		
General medical and surgical	2,871		
Domiciliary	119		

[1] Includes 388 admissions to domiciliary care.
[2] Includes 381 discharges from domiciliary care.
[3] Because of changes in classification, admissions minus discharges will not equal patients remaining.

The number of discharges for neuropsychiatric disabilities, particularly those occurring in the first 6 months of service, is a cause for concern. In these cases, however, there has been rather consistent agreement after study in the hospitals of the Administration with the diagnoses established in the armed forces.

All defects existing at the time of acceptance for service should be recognized and recorded since such recorded defects are not pensionable, unless aggravated by service. This recording would be particularly necessary should special physical standards be established for men for limited service.

The Administrator of Veterans' Affairs concluded by stating that, based on experience up to this time, it is evident that any lowering of the requirements for admission to the armed forces could be expected to increase the admission rate to facilities of the Veterans' Administration.

The Commission gave careful study to the large and increasing group of registrants who have been disqualified after examination as a possible source from which men might be obtained by revision of the requirements for admission. It was apparent that neuropsychiatric disabilities constitute a problem both in the numbers rejected for these causes at the induction stations and in the number who must be discharged within a comparatively short time after induction. A study of the reasons for the high incidence of neuropsychiatric disorders was not within the purview of the Commission. Every reasonable effort is made to recognize these conditions at the induction stations, but in the limited time available for examination it is not possible to recognize any but the most obvious. It is believed that the effectiveness of the psychiatric examination at the induction stations would be greatly enhanced if a properly taken social-adjustment history of each registrant were available to the examiners. It is highly desirable that these potential neuropsychiatric casualties be rejected at the induction stations. Although they are not temperamentally suited for service in the armed forces, they are in practically all cases capable of making a real contribution to the war effort in civilian activities. Both the Army and Navy are using every reasonable means to rehabilitate the neuropsychiatric case for further service, but in view of the mission of the services to prosecute the war, there is a point beyond which they should not go in expending time of personnel and use of training facilities for the possible salvage of individuals of very doubtful future value to the services.

It appears that there may be a lack of understanding of the significance of neuropsychiatric conditions which lead to separation from the armed services in relation to the discharged man's place in civil life. In the majority of cases the man's basic temperament and personality traits have not been altered by his service, and there is no apparent reason why he should not be expected to follow as gainful an occupation as he followed prior to his service. There is no doubt that these men can make a more valuable contribution to the prosecution of the war in a civilian status than in the armed services.

Those rejected for deficiency in education comprise another large group to which special attention was given. It is evident that the armed forces have already given this group consideration as a source of manpower. They are accepting as many at the present time as is

practical in view of the time and special personnel required to fit them for service. This pool of manpower, however, undoubtedly contains many men physically qualified for general service who could be inducted should provisions be made for their education to at least the minimum level necessary for duty in the armed forces.

Another seemingly potential source of manpower lies in the men who have been rejected for defects such as herniae which are usually remediable by surgery or other treatment. The feasibility of inducting men with such conditions subject to correction after induction was explored. Such a procedure would permit the acceptance of these men, but it is not believed that it would be a practical undertaking. At the present time the hospitals of the services are practically all at capacity. Inauguration of a program of corrective surgery for inductees would require additional personnel and facilities which are not now available. Furthermore, should individuals with such defects be inducted and later refuse to submit to the indicated procedures, the services would be faced with the necessity of discharging them and the individuals would have acquired the rights to hospitalization and other benefits which current law provides for all persons who have served in the armed forces.

Some time ago the services lowered the requirements for admission to permit the acceptance of men with conditions not requiring surgery for correction. Under these standards men are accepted with defective vision of a degree which requires lenses to afford usable vision, and lenses are furnished if the man is not already equipped. Absence of teeth is no longer a cause for rejection and literally thousands of men have been furnished dentures after induction. Uncomplicated gonorrhea and early syphilis are accepted and are treated during the training period.

Extension of this program for correction of physical defects after induction is considered inadvisable at this time.

The Commission has carefully studied Mobilization Regulations 1–9, United States Army, dated October 15, 1942, and subsequent changes, which contain the requirements for admission to the Army, Navy, and Marine Corps in effect in the induction stations for the examination of all registrants. This publication is attached as appendix I. Guided by the comments and opinions of those who appeared before it and in the light of the professional judgment of its members, the Commission determined that certain changes should be made in these regulations. These changes are set forth in appendix II. A complete statement of requirements for admission to the armed forces for both general and limited service, which includes the changes the Commission has determined should be made in the current regulations, is submitted as appendix III. It is recommended that this appendix be made the standard by which the fitness of registrants for induction will be determined.

The Director of Selective Service made the following comment following a careful study of the changes which the Commission determined should be made in the requirements now in effect for admission to the Army, Navy, and Marine Corps:

It is noted that there has been a clarification of wording which may aid in the interpretation and evaluation of the standards for acceptance, especially in the field of nervous and mental diseases and in the cardio vascular system. There are

many minor changes, some of which lower and others raise the actual physical standards. These deviations from the present standards are minor in character and do not permit an exact estimate of the number of men who will be affected by these changes. The most favorable estimate would be that the result in additional numbers inducted would not be significant. Hence, the maximum to be hoped for under these changes would be improvement of selection qualitatively with little result quantitatively.

CONCLUSIONS

The Commission has reached the following conclusions:

1. The physical requirements for admission to the armed services cannot be reduced below those contained in appendix III without impairing the efficiency of these services.
2. The services have reached saturation for newly inducted men for limited service since the need for men in this category will be fully met by men already in service who as a result of incidents of the service are no longer fit for general service.
3. It is evident that the urgent and increasing need of the services today is for men for general service and that this need will progressively increase until the war is successfully concluded.
4. It is apparent that these needs cannot be met by lowering the physical requirements for admission to the armed forces or by increasing the induction of men for limited service.
5. In view of the needs of the armed services for men qualified for general service, which needs cannot be fully met from the pool of men now on hand in class I–A plus the annual increment of men coming of military age, it is apparent that the manpower required for the prosecution of the war cannot be obtained except by induction of men living with their families and recourse to all other available sources.

Respectfully submitted.

ROSS T. MCINTIRE,
Rear Admiral, Medical Corps, United States Navy,
Chairman.

NORMAN T. KIRK,
Major General, Medical Corps, United States Army.
DR. FRANK H. LAHEY,
DR. EDWARD STRECKER,
DR. ALAN C. WOODS.

APPENDIX I

MOBILIZATION REGULATIONS

No. 1–9

STANDARDS OF PHYSICAL EXAMINATION DURING MOBILIZATION

WAR DEPARTMENT

Washington, October 15, 1942

STANDARDS OF PHYSICAL EXAMINATION DURING MOBILIZATION

CHANGES No. 2

WAR DEPARTMENT,
WASHINGTON, February 23, 1943.

MR 1–9, October 15, 1942, is changed as follows:

45. Limited service.—*a.* Rescinded.

b. Rescinded.

* * * * * * *

[A. G. 381 (1–26–43).] (C 2, Feb. 23, 1943.)

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

J. A. ULIO,
Major General,
The Adjutant General.

96050—44——2

STANDARDS OF PHYSICAL EXAMINATION DURING MOBILIZATION

CHANGES No. 1

WAR DEPARTMENT,
WASHINGTON, January 22, 1943.

MR 1–9, October 15, 1942, is changed as follows:

7. Limited service.—There are no general or miscellaneous defects to warrant initial selection for limited service which are not covered elsewhere in these regulations.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

8. Nonacceptable.

* * * * * * *

b. Active tuberculosis of any degree.

* * * * * * *

g. Acute rheumatic fever or authentic history of recurrent attacks of rheumatic fever, chronic rheumatism and chronic arthritis.

h. Active osteomyelitis of any bone or a substantiated history of osteomyelitis of any of the long bones of the extremities at any time.

* * * * * * *

o. Hernia, except small umbilical hernia.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

17. Limited service.

* * * * * * *

b. Loss of one eye or blindness in one eye not due to progressive organic change, with vision in the other eye of not less than 20/100 correctible to not less than 20/20.

c. Rescinded.

d. Rescinded.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

18. Nonacceptable.—Defects such as the following:

* * * * * * *

q. Permanent or well-marked strabismus.

r. Ptosis interfering with vision.

s. Trichiasis.

t. Chronic conjunctivitis.

u. Chronic dacryocystitis.

v. Pterygium interfering with vision.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

22. Determination of auditory acuity.—Acuity of hearing will be determined by the whispered voice test. To determine the acuity of hearing, place the registrant facing at right angles to the assistant, 15 feet distant, with ear to be tested toward assistant, and direct him to repeat promptly the words spoken by the assistant. If the registrant cannot hear the words at 15 feet, the assistant will approach foot by foot, using the same whisper, until the words are correctly repeated. Examine each ear separately, closing the other ear by pressing the tragus firmly against the meatus; the examiner may face the same direction as the registrant and close one of his own ears in the same way as a control. The assistant will use a whispered voice produced by speaking with the lungs in a state of complete exhalation so as to assure as great uniformity of sound output as possible. The whisper will be plainly audible to the examiner and use will be made of numerals, names of places, or other words or sentences,

until the condition of the registrant's hearing is evident. The acuity of hearing will be expressed as a fraction, the numerator of which is the distance in feet at which the words are heard by the normal ear; thus 15/15 indicates normal hearing, 10/15 partial hearing of a degree indicated by the fraction, that is, the registrant hears at 10 feet distant the words which the normal ear hears at 15 feet.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

23. General service.—*a.* Hearing in each ear of 8/15 or better.

* * * * * * *

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

24. Limited service.—*a.* Hearing in one or both ears less than 8/15 but not less than 5/15 in either ear. Deafness in one ear if the hearing is not less than 15/15 in the other ear.

b. Rescinded.

c. Rescinded.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

25. Nonacceptable.—Defects such as—

* * * * * * *

c. Perforation of the membrana tympani.

d. Acute or chronic mastoiditis.

e. Total loss of an external ear.

f. Atresia of the external auditory canal, or tumors of this part.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

27. General service.

* * * * * * *

c. Rescinded.

* * * * * * *

f. Rescinded.

g. Rescinded.

h. Rescinded.

i. Rescinded.

* * * * * * *

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

28. Limited service.—*a.* Deviation of the nasal septum which moderately interferes with nasal breathing.

b. Hay fever, if moderate.

c. Rescinded.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

29. Nonacceptable.—Defects such as—

* * * * * * *

d. Tracheostomy.

* * * * * * *

i. Nasal obstruction due to septal deviation, hypertrophic rhinitis, or other causes, if sufficient to produce mouth breathing.

* * * * * * *

l. Chronic laryngitis.

m. Perforation of the hard palate.

n. Stricture or other organic disease of the esophagus.

o. Harelip.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

p. Perforation of the nasal septum associated with interference of function, or ulceration or crusting, and when due to organic disease.

35. Limited service.—There are no skin criteria to warrant initial selection for limited service.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

38. Limited service.—There are no head defects to warrant initial selection for limited service.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

41. Limited service.

* * * * * * *

b. Rescinded.

c. Rescinded.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

42. Nonacceptable.—Conditions such as—

a. Tuberculosis, either active or healed.

b. Osteoarthritis.

* * * * * * *

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

44. General service.—*a.* Old or recent fractures which have healed normally with no resulting impairment of function.

b. Rescinded.

c. Rescinded.

* * * * * * *

g. Rescinded.

* * * * * * *

i. Stiff fingers of a degree not to interfere with function.

j. Flat foot unless accompanied with symptoms of weak foot or when the foot is weak on test. Pronounced cases of flat foot attended with decided eversion of the foot and marked bulging of the inner border, due to inward rotation of the astragalus, are disqualifying regardless of the presence or absence of subjective symptoms.

* * * * * * *

q. Rescinded.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

45. Limited service.—*a.* Loss of entire thumb of either hand.

b. Loss of two entire fingers of either hand, not to include the right index finger, provided the thumb remains.

c. Webbed fingers or toes, if severe in degree.

d. Rescinded.

* * * * * * *

f. Rescinded.

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n. Rescinded.

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[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

46. Nonacceptable.—Defects such as—

a. Loss of one or both thumbs.

b. Loss of the right index finger or more than two entire fingers of one hand.

c. Tuberculosis of a bone or joint.

d. Old ununited fractures.

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j. Flat foot when accompanied with symptoms of weak foot or when the foot is weak on test. Pronounced cases of flat foot attended with decided eversion of the foot and marked bulging of the inner border, due to inward rotation of

the astragalus are disqualifying regardless of the presence or absence of subjective symptoms.

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r. Active osteomyelitis of any bone, or a substantiated history of osteomyelitis of any of the long bones at any time.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

56. General service.

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f. Healed intrathoracic primary tuberculous lesions, demonstrable in roentgenograms, but of slight extent. The following specifications of the limits of such lesions are intended to exclude persons with disease which is most likely to be in part caseous and therefore potentially hazardous. The limits are set arbitrarily to provide an objective basis on which the examiner may render a decision. All measurements refer to single, standard 14- by 17-inch direct projection roentgenograms. These lesions may consist of—.

(1) Calcified residues of lesions of the intrathoracic lymph nodes, provided none of these exceeds an arbitrary limit of 1.5 cm in diameter and the total number of such lesions does not exceed five.

(2) Calcified lesions of the pulmonary parenchyma, provided the total number of these does not exceed ten. One of these may equal but not to exceed 1 cm in diameter, but none of the remainder may exceed 0.5 cm in diameter. In the roentgenogram such calcified lesions should appear isolated, sharply circumscribed, homogeneous, and dense.

The above arbitrary limits of calcified lesions are set on the assumption that large and numerous lesions are more likely to be partially unhealed, and therefore a potential source of future recrudescence, than small lesions of limited distribution. It is recognized, however, that in some individuals calcified tuberculous lesions exceeding these limits may be present which are so well healed that the possibility of future reactivation is remote. Further consideration may be given to the acceptability of persons with calcified lesions of this type when the state of health in all other respects clearly warrants the opinion that the lesions in question are healed. In such cases the history of the applicant and his age, as well as the character of the lesions as seen in X-ray films, provide criteria for estimating the probability of complete arrest of the tuberculous process. If there is no history of active tuberculosis or symptoms which might be interpreted as evidence of this disease and if the applicant is more than 25 years of age, and if finally the calcified lesions seen are dense and discrete in character and not hazy or irregular in outline, such lesions may be considered as not prejudicial to future health. In these cases the applicant may be accepted provided the report of physical examination and the chest X-ray films have been reviewed and acceptance has been recommended by a medical examiner specially qualified in the diagnosis of diseases of the chest.

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[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

57. Limited service.

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b. Rescinded.

[A. G. 381 (1–20–43).] (C I, Jan. 22, 1943.)

58. Nonacceptable.—Disqualifying defects such as—

a. Tuberculosis of the lungs or tracheobronchial lymph nodes except as defined in paragraph 56*f* and *b* below.

b. Scarred infiltrative tuberculous lesions of the lungs, except that small fibroid or calcified lesions represented in roentgenograms as sharply demarcated strandlike or well defined, small, nodular shadows not exceeding a total area of 5 square cms may be accepted after deferment until subsequent examination demonstrates that the lesion is stationary and not likely to be reactivated. The minimum period of time to determine this is 6 months. It must be recognized that either progression or regression of the lesion indicates instability. Clinical judgment, taking into consideration other factors, including age and race, must be exercised in estimating the likelihood of reactivation. Experience indicates a greater likelihood of reactivation of a lesion that appears to be stable in persons under 25 years of age than in older persons.

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e. Chronic bronchitis.

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[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

62. General service.

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c. A pulse rate of not lower than 50 per minute.

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[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

68. General service.

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c. Rescinded.
d. Rescinded.
e. Rescinded.
f. Rescinded.

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[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

69. Limited service.—There are no defects of the abdominal organs or wall to warrant initial selection for limited service.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

70. Nonacceptable.—Defects such as—

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c. Ulcer of the stomach or duodenum, if diagnosis is confirmed by the usual laboratory procedures or authentic medical history, also authentic history of gastric or duodenal ulcer.

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[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

72. General service.

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b. Rescinded.

c. Mild albuminuria without casts which is proved by observation and repeated examination to be temporary in character or orthostatic in type.

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f. Rescinded.
g. Rescinded.
h. Rescinded.

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73. Limited service.

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c. Rescinded.
d. Rescinded.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

74. Nonacceptable.

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u. Undescended testicle which lies within the inguinal canal.
v. Absence of one kidney.
w. Amputation of the penis.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

76. General service.

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c. Rescinded.
d. Rescinded.
e. Rescinded.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

84. Limited service—There are no neurological disorders which warrant initial selection for limited service.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

91. Limited service.—*a.* Rescinded.

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[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

102. Bed wetting.—Bona fide enuresis substantiated by a physician's affidavit or other acceptable documentary evidence is cause for unconditional rejection.

[A. G. 381 (1–20–43).] (C 1, Jan. 22, 1943.)

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:
J. A. ULIO,
Major General,
The Adjutant General.

*MR 1–9
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MOBILIZATION REGULATIONS
No. 1–9

WAR DEPARTMENT,
WASHINGTON, October 15, 1942.

STANDARDS OF PHYSICAL EXAMINATION DURING MOBILIZATION

SECTION I

INFORMATION AND INSTRUCTIONS

1. Purpose.—*a.* The purpose of these regulations is to—
   (1) Set forth the standards of physical requirements for men procured for general military service.
   (2) Prescribe permissible deviations from the general service standards for limited military service.
   (3) Describe deviations from the above standards which are not acceptable for any class of military service.

*This pamphlet supersedes MR 1–9, March 15, 1942, including section V, Circular No. 92, War Department, 1942.

b. So far as it applies to enlisted men AR 40-105 is superseded by these regulations. These regulations will apply to men in the following categories:

(1) Men enlisted or reenlisted in the Regular Army.
(2) Men for enlistment or reenlistment in the Regular Army Reserve, Enlisted Reserve Corps, and Reservists on call to active service if they have been in the inactive Reserve longer than 90 days.
(3) Men enlisted or reenlisted in the National Guard while in Federal Service.
(4) Enlisted men of the National Guard on induction into Federal Service.
(5) Men enlisted in the Army of the United States.
(6) Men inducted into the Army under the provisions of the Selective Training and Service Act of 1940.

2. Publication.—*a.* These regulations are published for the information and guidance of all medical examiners who may be used by the Army.

b. Medical examiners should read every section of these regulations in order that they may have a broad knowledge concerning physical standards.

3. Objective.—The objective is to procure men who are physically fit for the rigors of general military service or for limited military service. Therefore, examining physicians will consider these standards as a guide to their discretion and not construe them too strictly or arbitrarily. The examination will be carried out with the utmost care in order that no individuals who are unfit for service will be accepted, only to be discharged within a short time on certificate of disability. All minor defects as well as disqualifying defects will be recorded in order to protect the Government in the event of future claims for disability compensation. The likelihood of subsequent claims on account of disability should be borne in mind by the examiners in considering the qualifications of registrants with questionable defects. Whenever a registrant is accepted for general military duty but who, nevertheless, has a disease or other physical condition which although not disqualifying requires medical treatment, the nature of the condition and the need for treatment will be clearly stated on the report of physical examination.

4. Physical classification.—*a. General service.*—Physically qualified for general military service. Registrants will be recommended for assignment for general service if they meet the requirements therefor throughout the entire physical examination.

b. Limited service.—Physically unfit for general military service, but fit for limited military service. Individuals who fail to qualify for general service, and who do not fall below limited service requirements in any phase of the examination will be recommended for assignment to limited service unless, because of multiple defects, the medical examiners recommend unqualified rejection as nonacceptable. Men recommended as nonacceptable will not be accepted unless specific directions to that effect have been issued by the War Department.

c. Nonacceptable.—Physically unfit for any military service. All individuals who do not meet the physical requirements of general service, or limited service will be recommended as nonacceptable.

5. Defects not specifically mentioned in these regulations and hospitalization.—*a.* If any individual is regarded by the medical examiners as physically unfit for military service by reason of physical or mental defects not specifically noted in these regulations, he will nevertheless be recommended as unsuitable

for general service or for limited service, as the case may be. A brief statement of the reasons for the rejection will be entered on the report of physical examination. So far as practicable, however, the physical classification of individuals will conform to the specified requirements.

b. Hospitalization for a period not to exceed 3 days for men whose physical fitness for military service cannot be determined without hospital study is authorized. Military or other Government hospitals will be used for this purpose when practicable. When military or other Government hospitals are not available the use of civilian hospitals is authorized. *Individuals will not be hospitalized when their fitness for military service can be determined otherwise.*

c. All previous instructions in connection with physical standards which are in conflict with these regulations are rescinded.

Section II

GENERAL AND MISCELLANEOUS DEFECTS

6. General service.—*a.* Acute communicable diseases, provided acceptance of the individual is temporarily deferred until a final examination shows recovery without disqualifying sequelae. Individuals with uncomplicated venereal disease will not be accepted until instructions for their acceptance have been issued by the War Department. See paragraph 72*a*.

b. Malaria, acute, or malaria, chronic, unless severe.

c. Uncinariasis, unless severe.

d. Remediable incapacity due to recent acute illness, surgical operation, injury, employment or environment in civil life, provided acceptance is deferred until recovery is complete. Following any major surgical operation an individual will be deferred for a sufficient period of time to insure complete recovery without sequelae. The minimum period of deferment following a major surgical procedure will be at least 3 months. The actual period of deferment longer than 3 months will depend upon the condition for which operated and upon the discretion of the medical examiners.

7. Limited service.—Temporary incapacity as cited in paragraph 6*d*, if not easily remediable to a degree compatible with general service but which is considered acceptable for limited service.

8. Nonacceptable.—*a.* Carcinoma or other malignant disease of any organ or part of the body.

b. Active tuberculosis of any degree, either general or localized.

c. Leprosy or actinomycosis.

d. Late syphilis affecting the cerebrospinal or cardiovascular system or the viscera.

e. Chronic metallic poisoning, except argyria.

f. Mycotic infection of the lungs of other internal organs.

g. Acute rheumatic fever or history of recurrent attacks of rheumatic fever, chronic rheumatism and chronic arthritis, if occurrence is verified and malingering is excluded.

h. Active osteomyelitis of any bone or a substantiated history of osteomyelitis of any of the long bones of the extremities within the past 5 years.

i. Filariasis or trypanosomiasis.

j. Hodgkin's disease.

k. Uncinariasis, if severe.

l. Malaria, chronic, severe.

m. Splenectomy for any cause, other than trauma or congenital hemolytic icterus.

n. Leukemia.

SECTION III

HEIGHT, WEIGHT, AND CHEST MEASUREMENTS

9. Table of standard and minimum acceptable measurements of height, weight, and circumference of chest.

Height	Standard		Minimum	
	Weight	Chest measurement at expiration	Weight	Chest measurement at expiration
Inches	*Pounds*	*Inches*	*Pounds*	*Inches*
60	116	31¼	105	28¾
61	119	31½	107	29
62	122	31¾	109	29¼
63	125	32	111	29½
64	128	32¼	113	29¾
65	132	32½	115	30
66	136	32¾	117	30¼
67	140	33	121	30½
68	144	33¼	125	30¾
69	148	33½	129	31
70	152	33¾	133	31¼
71	156	34	137	31½
72	160	34¼	141	31¾
73	164	34½	145	32
74	168	34¾	149	32¼
75	172	35	153	32½
76	176	35¼	157	32¾
77	180	35½	161	33
78	184	35¾	165	33¼

10. Directions for taking height.—Use a board at least 2 inches wide by 80 inches long, placed vertically, and carefully graduated to ¼ inch between 58 inches from the floor and the top end. Obtain the height by placing vertically, in firm contact with the top of the head, against the measuring rod an accurately square board of about 6 by 6 by 2 inches, best permanently attached to graduated board by a long cord. The individual should stand erect with back to the graduated board, eyes straight to the front.

11. General service.—*a.* Those who fall within the requirements for height, weight, and chest measurement given in the table in paragraph 9.

b. Those whose weight is greater than the standards indicated for the height, provided the overweight is not so excessive as to interfere with military training.

12. Limited service.—Individuals who on examination are found to present conditions not within the accepted measurements for weight and chest circumference given in the table, who are otherwise mentally and physically fit, and who do not fall within the nonacceptable class may be accepted for limited military service.

13. Nonacceptable.—*a.* Less than 60 inches in height.

b. Less than 105 pounds in weight.

c. A height of more than 78 inches.

d. Overweight which is greatly out of proportion to the height if it interferes with normal physical activity or with proper training.

14. General considerations.—*a.* Individuals of 76 inches or more in height will be studied for the possibility of gigantism or acromegaly.

b. Examining physicians will use discretion and judgment in accepting registrants with variations in the ratio of height, weight, and chest measurements indicated in the table. When the weight is disproportionate and is believed to be due to some temporary condition, proper allowances may be made, provided it is the opinion of the examining physician that the variation is correctible with proper food and physical training. No individual may be accepted, however, whose weight is less than 105 pounds.

SECTION IV

EYES

15. Vision.—Visual acuity will be determined by standard methods. Examine each eye separately, without glasses, covering the other eye with a card (not with the hand). The individual is directed to read the test types from the top of the chart down as far as he can see, and his acuity of vision is recorded for each eye, with the distance of 20 feet as the numerator of a fraction and the size of the type of the lowest line he can read correctly as the denominator. If he reads the 20-foot type correctly, his vision is normal and recorded 20/20; if he does not read below the 30-foot type, the vision is imperfect and recorded 20/30; if he reads the 15-foot type, the vision is unusually acute and recorded 20/15, etc.

16. General service.—*a. For general military service in all arms and services.*—Registrants whose visual acuity is not less than 20/200 in each eye without glasses, if correctible to at least 20/40 in each eye. The actual possession of suitable glasses by an individual is not required for his acceptance under these standards.

b. Conditions due to iridectomy or other operation upon the eye, if the condition for which the operation was performed has been relieved and the vision is within or above the minimum standard requirements.

c. Nystagmoid movements if not persistent or pronounced and if true nystagmus is excluded.

d. Slight conjunctivitis.

e. Chronic simple conjunctivitis, if mild.

f. Slight adhesion of the lids to the eyeball.

g. Small pterygium not encroaching on cornea.

h. Strabismus which does not interfere with vision.

i. Ptosis which does not interfere with vision.

j. Color blindness.

k. Exophthalmos, if not of such degree as to have led to or threatened corneal ulceration and provided hyperthyroidism is excluded.

l. Blepharitis marginalis, if slight.

m. Blepharospasm, if mild.

n. Superficial corneal ulcer, provided acceptance is deferred until ulcer is healed without disqualifying impairment of vision.

17. Limited service.—*a.* A minimum vision of 20/400 in one or both eyes without glasses if correctible with glasses to at least 20/40 in each eye.

b. Loss of one eye or blindness in one eye not due to progressive organic change, with vision in the other eye of not less than 20/200 correctible to not less than 20/40.

c. The following conditions, if mild:

(1) Inversion and eversion of the eyelids.

(2) Ptosis interfering with vision.

(3) Trichiasis.

(4) Strabismus interfering with vision.

(5) Epiphora.

(6) Chronic blepharitis.

(7) Pterygium encroaching on cornea.

(8) Chronic dacryocystitis.

(9) Diplopia due to paralysis of ocular muscles of one eye.

(10) Blepharospasm.

d. Conjunctivitis, chronic, simple, moderate.

18. Nonacceptable.—Defects such as the following:

a. Vision less than the minimum requirements for limited military service.

b. Deformity of the eyelid or eyelids such as inversion or eversion of a degree that forcible closure fails to cover the eyeball or in which there is a resultant conjunctival inflammation, corneal irritation, or a restriction of the rotation of the eyeball.

c. Disfiguring cicatrices of eyes.

d. Lagophthalmos, if associated with signs of hyperthyroidism.

e. Pronounced exophthalmos.

f. Chronic keratitis.

g. Chronic recurrent inflammatory disease of the globe.

h. Chronic ulcer of cornea.

i. Any active disease of the retina, choroid, or optic nerve.

j. Detachment of the retina.

k. Nystagmus.

l. Glaucoma.

m. Diplopia due to paralysis of extrinsic ocular muscle unless mild in degree.

n. Abnormal condition of eyes due to disease of the brain.

o. Trachoma.

p. Any tumor of the orbit.

q. Permanent or well-marked strabismus of a severe degree.

19. Visual tests for detection of malingerers.—*a.* Malingerers may feign inability to open their eyes, total loss of vision in one or both eyes, or impaired vision in one or both eyes. Occasionally an inflammation in the eyes will be produced by putting sand or other irritating substance under the lids.

b. Malingerers who wish to evade military service by feigning impairment of vision may be divided into two classes, as follows:

(1) Those who claim total loss of vision in one eye.

(2) Those who claim partial loss of vision in one or both eyes. Either group may have a normal acuity of vision or may exaggerate a defect actually present.

c. In testing for malingering the examining physician will bear in mind that detection is more likely to result when the man is allowed to believe that his case is regarded from the first as genuine and that his story is not discredited. There is something indefinable in the bearing of the malingerer which experience alone can detect. He may be self-assertive and overconfident; he may be hesitant or evasive. Careful observation will be made of his conduct and every movement noted. The nature of the man's answer will be taken into account and considered in the light of the kind of reply that is given when a nonmalingerer is being examined.

d. The following equipment may be necessary:

(1) Trial frame, blank, spherical lenses: +16, +3, +0.25, —3, —2, —1, —0.25.

(2) Two prisms, one 6° and one 10°.

(3) Opthalmoscope (electric battery in handle).

(4) Condensing lens.

(5) Loupe.

(6) Red and green letters on glass:

(*a*) Letters varying in size.

(*b*) Spectacle frame containing red and green glasses.

(7) Special test cards, one a duplicate, with letters reversed to use with a mirror.

(8) Special illiterate test cards.

(9) Mirror large enough to reflect test cards.

(10) One stereoscope with special card.

(11) Retinoscope (electric, with battery in handle).

(12) Ruler about 1¼ inches wide.

(13) Three disks of polaroid 36 mm in diameter and 2 mm thick.

e. The principle involved in the polaroid test is that light polarized in any given meridian by a polaroid screen is selectively absorbed by an analyzing polaroid screen whose axis is at an angle to the axis of the polarizing screen. The test may be conducted as follows: Three disks of polaroid 36 mm in diameter and 2 mm thick are required. They are held in the ordinary trial frame with the handle corresponding to the polarizing axis. One polaroid disk is placed before each eye with the polarizing axis horizontal. The individual is then asked to read the smallest possible line of letters on the test chart with both eyes open. Immediately the third polaroid disk is rotated so that the polarizing

axis becomes vertical for the length of time that it takes to read three or four letters. The rotation of the third disk to the vertical position prevents the passage of any light, so that if the reading of the test chart is continued during this time it is very evident that the poor eye is functioning. The disk may be used with correcting spectacle lenses if necessary. Care must be exercised to see that the poor eye is not closed while the polarized disk before the other eye is at right angles. Also the good eye must be occluded by the opposed polaroid disk for only a short period at a time so that the individual does not become aware of the momentary elimination of visual acuity in that eye.

20. Other methods of examination.—*a. To verify total loss of vision in one eye.*—(1) A 6° prism, base down, is placed before the admittedly sound eye while the man looks at a distant light or candle. If he sees two candles, binocular vision is proved. The examiner may vary the test by placing the prism before the "blind" eye, either base up or base down.

(2) A prism of 10°, with base outward, is placed before the "blind" eye. If there is any sight in this eye, double vision will be produced, and the eye will be seen to move inward to correct it and fuze the two images.

(3) The alleged "blind" eye is covered. A prism of 10°, with the apex up, is placed before the "seeing" eye in such a position that its edge lies horizontally across the center of the pupil. This produces monocular diplopia. The prism is then moved upward so as to be completely in front of the good eye and at the same time the "blind" eye is uncovered. If diplopia is produced or admitted, there is sight in the "blind" eye.

(4) *Test with colored glasses and letters.*—This consists in directing the individual to read a row of special red and green letters on glass through a special red and green glass. The red letters will be invisible to the eye that has the green glass, and vice versa, but if all the letters are correctly read irrespective of their color there must be sight in the "blind" eye. The proper illumination back of the chart must be observed. This test is not applicable to individuals who are color-blind to red and green.

(5) *Test with trial glasses.*—A high-plus glass is placed before the good eye and a low-plus or minus before the "blind" eye. If the distant type is read, the vision in the "blind" eye is good.

(6) *Stereoscope test.*—This may be made with ordinary stereoscope, the printed matter so arranged that certain portions of it are not present before one of the eyes.

(7) *Bar test.*—Interpose a ruler about 1¼ inches wide vertically midway between the two eyes at about 4 to 5 inches' distance; direct the man to read from a printed page with lines at least 4 inches long. If able to read the lines, binocular vision exists.

(8) The action of the pupil must be carefully tested, there usually being no movement to light stimulation when the eye is blind. If the examiner is not satisfied, the following examination will be made:

(*a*) *Oblique examination.*—A careful examination of the cornea will be made with the aid of a condensing lens and a loupe.

(*b*) *Ophthalmoscopic examination.*—A searching examination with the ophthalmoscope will be made, together with an estimation of the refractive error. The pupil will be dilated if necessary.

b. To verify partial loss of vision in one or both eyes.—(1) The most common manifestation of malingering takes the form of a statement that one eye is imperfect. Men pleading this disability may be divided into two classes:

(*a*) Those who pretend to have a visual defect.

(*b*) Those who are aware they have a visual defect and exaggerate its effect.

(2) No hard-and-fast tests can be prescribed for the detection of these cases. Much depends on the alertness and ingenuity of the examining physician.

(3) The tests with prisms are not applicable here, for there is not pretended blindness in one eye but simply an alleged diminution of visual acuity.

(4) If a room 30 to 40 feet long can be obtained for testing vision, place the individual suspected of malingering at 30 to 35 feet from the test chart. Direct him to read the letters and note the result. He should then be brought up to 20 feet from the card and retested. If he still reads only the same line and does not read any of the smaller type, he is malingering.

(5) *Mirror test with special cards.*

(*a*) Test cards are used which are identical, one having the letters reversed. The registrant is directed to read the letters on the chart across the room and then in a mirror beside it which reflects reverse letters that are placed over his head. The letters seen in the mirror are located double the distance of the direct letters from the man being examined. The malingerer is apt to read in the mirror the line which he read on the first card, showing that his vision is twice as good as he pretends.

(*b*) In order to obviate the use of test letters in the mirror test, various common objects approximating the size of the 20/40 and 20/30 letters may be used by asking an individual to differentiate between a dime and a penny, a cigarette and a pencil, a pen and a pencil, the number of spots on playing cards, or between the different aces, held on either side of his head and reflected in the mirror at 20 feet distance.

(6) *Trial frame test.*—Place a trial frame upon the man's face and put before the sound eye a high convex lens (+16D) and before the "weak" eye a plane or weak lens (0.25) which will not interfere with vision. If letters placed at a distance of 20 feet are read, the fraud is at once exposed.

(7) *Oblique examination.*—This is conducted with condensing lens and loupe to determine corneal or lenticular opacities.

(8) *Ophthalmoscopic examination.*

(*a*) It is probable that the malingerer will resist the ophthalmoscopic examination by frequent winking or rolling of the eyes. In this event it is best to caution the man that a report of his vision must be made, and then to postpone further examination until after the next few individuals have been examined.

(*b*) Use the ophthalmoscope as an aid in estimating the refractive error. If no error of marked degree exists and the media and fundi are normal, the relation between the alleged vision and the refractive condition furnishes an important clue. If the error is about +4 or —2, the visual acuity could be about 20/100 but when the defect

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cannot be accounted for objectively and the vision is brought from 20/100 to 20/50 or 20/30 by means of a low-plus or minus glass, the man is malingering.

(9) *Retinoscopy.*—Look for corneal and lenticular opacities and estimate refractive errors.

c. Occupation.—(1) The man's occupation in civil life may have been such that it could not have been followed without more vision than he claims.

(2) In the absence of ocular defects, continuous and persistent blepharospasm, the use of colored glasses, eye shades, or eye bandages will be regarded with suspicion.

d. Diplopia.—Cases of malingering are occasionally met with in which the men complain that they see double. These must be investigated with the application of the ordinary tests as if they were genuine and with every precaution taken to guard against a serious nerve lesion being overlooked.

SECTION V

EARS

21. Examination for disease.—The external ears and mastoid region will be examined by inspection and, if necessary, the mastoid region by palpation. The external auditory canal and membrana tympani will be examined by reflected light or by a self-illuminating otoscope. Cerumen will be removed, if necessary, in order to visualize satisfactorily the membrana tympani.

22. Determination of auditory acuity.—Acuity of hearing will be determined by the low conversational voice test. To determine the acuity of hearing, place the individual facing at right angles to the assistant, 20 feet distant, with ear to be tested toward assistant, and direct him to repeat promptly the words spoken by the assistant. If the individual cannot hear the words at 20 feet, the assistant will approach foot by foot, using the same tone of voice, until the words are repeated correctly. Examine each ear separately, closing the other ear by pressing the tragus firmly against the meatus; the examiner may face the same direction as the individual and close one of his own ears in the same way as a control. The assistant will speak in a low conversational voice (not a whisper), just plainly audible to the examiner, and will use numerals, names of places, or other words or sentences until the condition of the individual's hearing is evident. The acuity of hearing will be expressed in a fraction, the numerator of which is the distance in feet at which the words are heard by the normal ear; thus 20/20 indicates a normal hearing, 10/20 partial hearing of a degree indicated by the fraction, that is, the individual only hears at 10 feet distance the words which a normal ear hears at 20 feet. The duties of the examiner and assistant may be reversed if desired. If any doubt arises as to the correctness of the answer given, the individual may be blindfolded and a watch used to determine the dis-

tance at which it can be heard, care being taken that the individual does not know the distance from the ear at which it is being held. The watch if used will be one whose ticking strength has been tested by determining the distance at which it can be heard by a normal ear.

23. General service.—*a*. Hearing in each ear of 10/20 or better; 5/20 in one ear and 15/20 in the other; 0/20 in one ear and 20/20 in the other.

b. Healed scar of mastoid operation without marked deformity and if hearing is not below requirements.

24. Limited service.—*a*. Hearing in one or both ears less than 10/20 but not less than 5/20. Complete deafness in one ear if the hearing is not less than 10/20 in the other ear.

b. Loss of one or both external ears if the individuals have followed a useful vocation in civil life.

c. Perforation of the membrana tympani provided there is a trustworthy history of no symptom of otitis media or disease of mastoid during preceding 2 years.

25. Nonacceptable.—Defects such as—

a. Hearing less than the minimum hearing prescribed under limited service.

b. Chronic purulent otitis media with or without mastoiditis.

26. Tests for malingering in hearing.—Individuals who are malingerers in regard to hearing usually claim magnification of slight imperfection on one side with a complaint of past trouble. Exaggeration of defects in hearing extends usually to declarations of total deafness on one side. The following directions will be observed in examining suspected malingerers:

a. In making these examinations the observer will have a skilled assistant and all communications between them will be in a low, whispered voice.

b. The assistant will stand at the back of the suspected malingerer and will, at the direction of the examining physician, obstruct the ears of the suspect as directed, by pressing the tragus firmly into the auditory meatus.

c. The suspected malingerer's eyes will be securely and completely blindfolded.

d. An accurate notation will be made of which ear is deaf as claimed by the individual. Then a critical examination of the auditory canal, membrana tympani, and for patency of the eustachian tubes will follow.

e. Then an accurate test of the normal ear will be made.

f. If the suspect gives markedly conflicting statements, when the normal ear is tightly plugged, as to the distance at which he hears the voice, it is fair to assume that he is a malingerer.

g. The simplest and most available test for malingering is the use of an ordinary binaural stethoscope. The tubing leading to the earpiece to be applied to the normal ear is occluded by clamping with a hemostat and the earpieces are placed in the ears of the blindfolded suspect. The examining physician speaks in a soft tone or counts into the bell-shaped chest portion of the stethoscope and the suspect is told to repeat what he hears. The tubes are removed from the ears, and the assistant is told to occlude the normal ear. The same words or numerals are repeated. The suspect will now claim failure to hear the words or numerals which he had previously heard through the tube with the allegedly deaf ear.

h. Erhard's test is another simple method for malingerers which requires no special apparatus. If the external auditory canal of a normal ear is tightly

packed with absorbent cotton, it will still conduct sound waves to a limited degree, a loud-ticking watch even under these circumstances being heard about 1 or 2 meters. The suspect has his ear which is stated to be deaf occluded with cotton, and then the test is made with the hearing of the normal ear, the suspect being told to count the ticks of the watch. The suspect's normal hearing ear is then occluded with cotton and the testing is made with the unoccluded supposedly deaf ear. Under this test, if he claims failure to hear the watch under 1 meter, he is malingering.

i. The Chiman-Moos test is made with the C2 tuning fork. The vibrating tuning fork is held at equal distance from each ear. The suspect may claim that he hears it better in the normal ear. The vibrating tuning fork is then placed on the vertex of the skull. The suspect hearing it equally well in both ears will at first hesitate and then state he hears it better in the normal ear. In diseases of the conducting apparatus he will hear it better in the diseased ear. If now the external meatus of the normal ear is tightly closed and the vibrating tuning fork is placed upon the vertex of the skull, the individual with the diseased ear will state he hears it better in the normal, closed ear, or it may be impossible for him to decide in which ear he perceives the tone better. The suspect, with the normal ear tightly obstructed, will state that he does not perceive the sound of the fork when thus placed on the vertex of the skull.

Section VI

MOUTH, NOSE, FAUCES, PHARYNX, TRACHEA, ESOPHAGUS, AND LARYNX

27. General service.—*a.* Enlarged tonsils.

b. Adenoids.

c. Small benign tumors of the nasal and buccal mucous membrane.

d. Deviation of the nasal septum or enlarged turbinates which do not seriously interfere with nasal breathing.

e. Acute primary sinusitis, provided the acceptance of the individual is deferred for reexamination until after a reasonable time has elapsed and the sinusitis has disappeared.

f. Laryngitis manifested by hoarseness, laryngeal cough, and congestion of the vocal chords as confirmed by laryngoscopy, unless tuberculous, syphilitic, or malignant in origin.

g. Alleged stricture of the esophagus which is unattended by evidence of organic disease of the esophagus as shown by a fluoroscopic examination while the individual is swallowing a barium mixture.

h. Perforation of hard palate which is not associated with a disqualifying disease and does not seriously interfere with speech.

i. Moderate deformity of the structures of the mouth which does not seriously interfere with mastication or speech.

j. Hay fever, if mild.

28. Limited service.—*a.* Deviation of the nasal septum which markedly interferes with nasal breathing.

b. Hay fever, if moderate.

c. Nasal polypi, if mild or moderate and not accompanied by evidence of chronic sinus disease.

29. Nonacceptable.—Defects such as—

a. Deformities of the mouth, throat, and nose which interfere with mastication of ordinary food, with speech, or with breathing.

b. Destructive syphilitic disease of the mouth, nose, throat, larynx, or esophagus.

c. Laryngeal paralysis due to any cause.

d. Permanent tracheostomy.

e. Stricture of the esophagus.

f. Chronic sinusitis of the accessory sinuses of the nose. (This diagnosis will be established by the presence of a chronic nasal discharge, large nasal polypi, and other signs and symptoms and confirmed by transillumination or X-ray examination or both.)

g. Chronic atrophic rhinitis with offensive odor (ozena).

h. Malignant neoplasms of the larynx.

i. Nasal polypi, if severe.

j. Aphonia.

k. Hay fever, if severe.

30. Use of diagnostic aids.—Examining physicians will make use of laryngoscopy, transillumination of the sinuses, and X-ray when available to determine more definitely the physical fitness of individuals who have defects involving the upper air passages, head, or esophagus when such diagnostic aids are indicated.

Section VII

DENTAL REQUIREMENTS

31. General service.—*a.* Individuals who are well nourished, of good musculature, are free from gross dental infections, and have a minimum requirement of an edentulous upper jaw and/or an edentulous lower jaw, corrected or correctible by a full denture or dentures.

b. Malocclusion.—When it is evident from the individual's general physical condition that his malocclusion has not seriously interfered with the mastication of a normal diet, provided that in the excursions of the mandible or with the mandible at rest, the teeth do not impinge upon opposing soft tissues and that the malocclusion has not resulted in secondary pathological changes.

32. Limited service.—There are no dental conditions that warrant classification as limited service.

33. Nonacceptable.—*a.* Diseases of the jaws and associated structures which are irremediable or not easily remedied, or which are likely to incapacitate the individual for satisfactory performance of military duty.

b. Extensive loss of oral tissue in an amount that would prevent replacement of missing teeth by a satisfactory denture.

SECTION VIII

SKIN

34. General service.—*a.* Acute nonexanthematous and noncommunicable diseases of the skin which ordinarily run a temporary course.

b. Diseases which are trivial in character and which do not interfere with the general health and are not incapacitating. Among these common and usually trivial diseases may be enumerated—

(1) Acne, mild or moderate. (Care must be taken to exclude individuals with chronic severe acne, particularly when the face is involved to the extent of being markedly disfiguring or the shoulders extensively involved, making it likely to be aggravated by shoulder straps of packs or by other military equipment.)

(2) Anomalies of pigmentation.

(3) Scars not extensive, disfiguring, nor incapacitating in character.

(4) Warts.

(5) Skin infections, if mild and considered of no significance.

(6) Acute eczema, if mild.

(7) Naevi which are not greatly disfiguring and are not so located as to be subject to irritation or trauma by the normal wearing of military equipment.

(8) All forms of pediculosis.

(9) All forms of ringworm, unless severe and not easily remediable.

(10) Scabies, unless severe and not easily remediable.

(11) Mild and not extensive psoriasis.

c. Simple ulcers or other acute pathological conditions of the skin which are easily curable.

d. Unusual skin conditions should arouse suspicion of self-inflicted lesions (dermatitis factitia). See section XXI.

e. True alopecia areata, provided the existence of disqualifying endocrine, neurological, or other disqualifying conditions are excluded.

35. Limited service.—Such conditions as chronic diseases of the skin of the type which disqualify for general military service, provided the individual has successfully followed a useful vocation in civil life.

36. Nonacceptable.—Serious or incapacitating skin disorders such as—

a. Chronic skin disease, chronic ulcers of the skin, or cured syphilitic lesions which are so severe as to incapacitate the individual for the duties of a soldier or so disfiguring as to render the individual objectionable in common social intercourse.

b. Actinomycosis.

c. Dermatitis herpetiformis of long duration.

d. Epidermolysis bullosa.

e. Generalized dermatitis of long duration.

f. Allergic dermatoses, if severe.

g. Mycosis fungoides.

h. Chronic pemphigus.

i. Lupus vulgaris.

j. Elephantiasis.

k. Ringworm, if very severe and not easily remediable.

l. Scabies, if very severe and not easily remediable.

m. Cysts and benign tumors of the skin of such size and/or location as to interfere with the normal wearing of military equipment.

n. Pilonidal cyst or sinus. (If there is only a simple dimpling of the skin or short simple sinus in the postanal region, the individual will be accepted for general service.)

SECTION IX

HEAD

37. General service.—*a.* Moderate deformities of the bones of the skull such as depressions, exostoses, etc., unassociated with evidence of disease of the brain, spinal cord, or peripheral nerves and not preventing the individual from wearing military headgear.

b. Abnormalities which are apparently temporary in character resulting from recent injuries. (These include severe contusions and other wounds of the scalp and cerebral concussion. Individuals with these conditions will have the final examination temporarily deferred for 3 months.)

38. Limited service.—Osseous defects due to decompression or trephine of the skull, if asymptomatic and unassociated with bulging at the site of operation.

39. Nonacceptable.—*a.* Deformities of the skull in the nature of depressions, exostoses, etc., of a degree which would prevent the individual from wearing military headgear.

b. Deformities of the skull of any degree associated with evidence of disease of the brain, spinal cord, or peripheral nerves.

SECTION X

SPINE, SCAPULAE, AND SACROILIAC JOINTS

40. General service.—*a.* Lateral curvature of the spine of 2 inches or less from the midline if the mobility and weight-bearing power are good.

b. Fracture of the coccyx.

c. Prominent scapulae not interfering with wearing of uniform or military equipment.

d. Complaint of disease of the sacroiliac and lumbo-sacral joints which is unassociated with objective signs and symptoms.

e. Fracture of the spine or pelvic bones which has healed without marked deformity and which has not interfered with the following of a useful vocation in civil life.

41. Limited service.—*a.* Lateral deviation of the spine from the midline of more than 2 inches and less than 3 inches.

b. Nontuberculous diseases of the spine which are unassociated with such rigidity or other symptoms that the registrant has been incapacitated for following a useful vocation in civil life.

c. Disease of the sacroiliac and lumbo-sacral joints of a degree which disqualifies for general military service, if the individuals have followed a useful vocation in civil life.

42. Nonacceptable.—Conditions such as—

a. Tuberculosis, either active or healed.

b. Osteoarthritis, partial or complete, if sufficient in degree to interfere with the following of a useful vocation in civil life.

c. Healed fractures of the vertebrae or pelvic bones with associated disqualifying symptoms.

d. Lateral deviation of the spine from the midline of more than 3 inches. Curvature of the spine (kyphosis or lordosis) of a degree sufficient to interfere with the wearing of a uniform or military equipment or which has prevented the individual from following a useful vocation in civil life.

e. Disease of the sacroiliac and lumbo-sacral joints which is of a chronic type and is obviously associated with pain referred to the lower extremities, muscular spasm, postural deformities, and limitation of motion in the lumbar region of the spine.

43. X-ray examination.—When examining physicians are in doubt concerning the cause and the extent of disease of the bones and joints an X-ray examination will be made.

Section XI

EXTREMITIES

44. General service.—*a.* Old or recent fractures which have healed normally with no resulting impairment of function.

b. Paralysis of a muscle or group of muscles which does not interfere with function.

c. Benign tumors of bone or defects due to their removal when the condition does not interfere with the function of the extremity or the joint involved.

d. Recent injury of a bone or joint with or without fracture or dislocation which, in the opinion of the examiners, is only temporarily incapacitating. (Individuals with these conditions will be given a period of time not less than 6 weeks for recovery before the final examination is made.)

e. Webbed fingers and toes, unless severe in degree.

f. Loss of two entire fingers of either hand, except a combination of right index and middle finger.

g. Loss of entire right index finger, provided right middle finger is present and normal.

h. Scars and deformities of moderate degree of the hand or hands which do not interfere with normal function.

i. Stiff fingers of a degree not to interfere seriously with function.

j. Pes planus unless accompanied by marked deformity, rigidity, or weakness, or of such degree as to have interfered with useful vocation in civil life.

k. Hallux valgus, unless severe.

l. Clubfoot of slight degree if tarsal, metatarsal, and phalangeal joints are flexible, permitting the wearing of a military shoe and, in the opinion of the examiner, will not interfere with the performance of military duty.

m. Slight claw toes not involving obliteration of the transverse arch and which do not interfere with the wearing of a military shoe.

n. Hammertoe which is flexible and which does not interfere with the wearing of a military shoe. (Hammertoe usually involves the second digit and unless it is rigid is not a disqualifying defect.)

o. Absence of one or two of the small toes of one or both feet, if function of the foot is good.

p. Ingrowing toenails, unless severe.

q. Individuals who have had cartilages removed from the knee joint will be accepted for general military service provided at least 6 months have elapsed since operation and there are no residual symptoms and provided further that upon careful examination no abnormal mobility is elicited.

45. Limited service.—*a.* Loss of entire thumb of either hand.

b. Loss of three entire fingers of either hand, including the right index finger, provided the thumb remains.

c. Webbed fingers or toes, if severe in degree.

d. Ganglion and other benign tumors of the hand or fingers, if they do not interfere greatly with function.

e. Moderate deformities of one or both upper extremities which do not and have not interfered with function to a degree to prevent the individual from following a useful vocation in civil life.

f. Internal derangement of the knee joint, if not severe enough to have prevented him from following a useful vocation in civil life.

g. Abduction and pronation of the foot (knock-ankle) when this condition is not associated with rigidity of the tarsal joint or with deformity of the foot.

h. Loss of great toe.

i. Loss of dorsal flexion of great toe.

j. Hammertoe with rigidity.

k. Other defects of the feet which disqualify for general military service but do not prevent the individual from wearing a military shoe and which have not prevented him from following a useful vocation in civil life.

l. Moderate deformities of one or both lower extremities which do not and have not interfered with function to a degree to prevent the individual from following a useful vocation in civil life.

m. Adherent scars of the skin and soft tissues of an extremity, if not incapacitating and likely to break down.

n. Old ununited fractures which do not interfere with good function.

o. Healed disease or injury of wrist or elbow with resulting limitation of motion, if not severe in degree.

46. Nonacceptable.—Defects such as—

a. Loss of both thumbs.

b. Loss of more than three entire fingers of one hand.

c. Tuberculosis of a bone or joint.

d. Old ununited fractures which interfere with function.

e. Old unreduced or recurring dislocations of any of the major joints.

f. Disease of any bone or joint healed with such resulting deformity or rigidity that the function is impaired to a degree that it will interfere with military service.

g. Muscle paralysis or contraction which disturbs function to the degree of interference with military service.

h. Adherent scars of skin or soft tissue to a degree which seriously interfere with function.

i. Varicose veins, if severe in degree or if associated with edema or with present or previous ulcer of the skin.

j. Pes planus, if accompanied by marked deformity, rigidity, or weakness, or of such a degree as to have interfered with a useful vocation in civil life.

k. Obliteration of the transverse arch associated with permanent flexion of the small toes (claw toes).

l. Hallux valgus, if severe and associated with marked exostosis or bunion, especially when there are signs of irritation over the joint.

m. Clubfoot, if marked in degree or which interferes with the wearing of a military shoe.

n. Diseases of the bone or of the hip, knee, or ankle joint which interfere with function and weight-bearing power.

o. Deformities due to fracture or other injury which seriously interfere with function and weight-bearing power.

p. Sciatica which is apparently intractable and disabling to the degree of interference with the function of walking and weight-bearing power.

q. Amputations of extremities in excess of those already cited.

r. Active osteomyelitis of any bone, or a substantiated history of osteomyelitis of any of the long bones within the past 5 years.

47. General considerations.—It is important that individuals with defects of the feet which would prevent them from taking proper training will not be accepted for general military service. It is quite as important that defects of the feet which are not disabling will not be considered disqualifying for general military service.

Section XII

NECK

48. General service.—*a.* Nonspastic contraction of the muscles of the neck which is not of great degree and will not prevent the wearing of a uniform or military equipment.

b. Simple goiter unassociated with pressure symptoms, provided the enlargement of the thyroid will not interfere with the wearing of a uniform or military equipment.

c. Enlarged lymph nodes of the neck which are not a manifestation of systemic disease, do not apparently interfere with the general health, and are not large enough to interfere with the wearing of a uniform or military equipment.

49. Limited service.—There are no neck criteria to warrant initial selection as limited service.

50. Nonacceptable.—*a.* Exophthalmic goiter. See section XVII.

b. Thyroid enlargement from any cause associated with toxic symptoms. See section XVII.

c. Carcinoma of the thyroid or other structures of the neck.

d. Enlargement of the lymph nodes of the neck associated with leukemia or Hodgkin's disease.

e. Lymphosarcoma.

f. Tuberculous lymph nodes.

g. Nonspastic contraction of the muscles of the neck or cicatricial contraction of the neck to the extent that it interferes with the wearing of a uniform or military equipment or so disfiguring as to render the individual objectionable in common social intercourse.

h. Spastic contraction of the muscles of the neck.

i. Simple goiter unassociated with toxic pressure symptoms, enlarged lymph nodes and benign tumors of the neck if the enlargement is of such degree as to interfere with wearing of a uniform or military equipment.

j. Simple adenomatous goiter.

k. Thyrolingual cyst.

Section XIII

LUNGS AND CHEST WALL

51. Chest examination.—The chest examination will include a roentgenogram, as well as the usual methods of physical diagnosis. A pertinent history of past chest diseases will be taken. Because of its importance and frequency, special consideration must be given to the detection of tuberculosis.

52. History.—Inquiry will be made about previous and present symptoms of respiratory disorders, particularly if abnormalities of the chest are discovered, if the weight is below normal without other explainable cause, if there is unexplained fever, or if there are indications of possible tuberculous lesions in other parts of the body, such as fistula in ano or enlarged lymph nodes. The history of chronic or frequently recurring cough and expectoration, hemoptysis, pleurisy, or chronic laryngitis requires special investigation for a cause. It must be remembered, however, that pulmonary tuberculosis may exist in its earliest stages without producing any symptoms.

53. X-ray examination.—Chest X-ray films made on individuals entering the military service are to serve as permanent records. Care will be exercised in processing these films to insure their keeping qualities and in marking them in order that they may always be accurately identified. Chest X-rays will be made on selectees and applicants for voluntary enlistment and reenlistment as indicated below.

a. Selectees.—Chest X-ray will be made on selectees at the place of initial examination whenever practicable. Men who are not X-rayed at the time of the

initial examination will be X-rayed upon arrival at reception centers and the films interpreted before induction.

b. Applicants for voluntary enlistment and reenlistment.—(1) Applicants for voluntary enlistment or for reenlistment more than 3 months following discharge from previous Army service will have a chest X-ray prior to acceptance whenever facilities are available for this purpose. Army facilities will be used to the utmost but when these and the roentgen facilities of other Federal agencies are not available, competent civilian X-ray laboratories may be utilized. Applicants for reenlistment immediately following discharge from previous Army service will have had an X-ray made prior to discharge and in such cases reexamination by X-ray is unnecessary.

(2) When it is not practicable to have chest X-rays made on individuals applying for enlistment and reenlistment prior to acceptance, if otherwise qualified, they may be enlisted and a chest X-ray made at the first Army station to which assigned. Recruits and those not applying within 90 days for reenlistment whose X-ray of the chest is made subsequent to their acceptance and who are found to have disqualifying defects as a result thereof will be immediately discharged on certificate of disability.

(3) In order to insure that all individuals are given a chest X-ray as provided in (1) and (2) above, the date and fact of chest X-ray examination will be recorded under the heading "Carrier Examinations" on page 1 of the individual's Service Record. This information will be recorded upon the initiation of the service record of individuals whose enlistment or reenlistment examination has included a chest X-ray. For others it will be recorded upon completion of the chest X-ray examination.

c. Identification.—(1) Identifying marks which are photographed on the film at the time of its exposure are most satisfactory. This may be accomplished with the special attachment which forms an integral part of the photoroentgenographic unit or by lead foil stencils for use with standard X-ray equipment. The individual's identification tag is readily photographed upon the film. Its use when available will obviate the necessity for including the individual's name and serial number in the stencil or adding it to the film as described below if stenciling equipment is not available. Such identifying data as cannot be photographically recorded at the time the film is made will be added as soon as practicable after processing of the film is completed. Experience has shown that a good grade of white ink, well shaken to form an even mixture, provides the best medium for writing on acetate films; ordinary black ink, for writing on paper films. If available, a perforating machine making letters and figures of appropriate size may be used for recording additional data on films after they have been processed. Identifying marks other than those which are recorded photographically will be placed on the light portion of the film corresponding with the subdiaphragmatic area. Care will be taken that identifying words and figures are printed, perforated, or written so that they are clearly legible. Data photographically recorded will be located in the upper right and left corners of the film.

(2) For individuals being examined for entrance into the enlisted service, the minimum identifying data will include the following: place of examination; date; the individual's last name, first name, and middle initial; his home address; Army serial number, and in the case of registrants, their local board identifica-

tion code number. Except for the Army serial number, these data will appear in the upper right and left corners of the film as follows:

	Johnson, Carl D.
Camp Forrest, Tenn.	1205 West Avenue
February 28, 1942	Nashville, Tenn.
	48–037–005

(The local board identification code number will be found at the right side of the local board stamp placed on DSS Form 221.)

(3) Since serial numbers are not given until men have been accepted for service, all films of accepted men will be held at the home station of the Army examining boards until individual serial numbers have been obtained and entered thereon.

d. Disposition of films made in continental United States and Puerto Rico.—(1) Films made in the examination of men voluntarily enlisted or inducted into the service or discharged therefrom, after being carefully checked for proper identification, will be assembled in packages of appropriate size and mailed promptly under penalty cover to the Veterans' Administration, Kansas Avenue and Upshur Street NW., Washington, D. C. All packages of films sent to the Veterans' Administration will be labeled "Exposed X-ray Films" and will show the name of the Army organization making shipment.

(2) All chest X-ray films of individuals who are rejected for any reason will be forwarded to the State Director of Selective Service at the State headquarters of the State from which the registrant is presented. Films forwarded to State directors will be sent in separate packages appropriately labeled as indicated below:

(*a*) "Films of individuals recommended for reexamination in 6 months because of borderline tuberculous or other chest conditions."

(*b*) "Films of individuals rejected because of tuberculous or other chest conditions."

(*c*) "Films of individuals rejected because of other than chest conditions."

e. Disposition of films made in Hawaiian Department.—Chest X-ray films made on individuals in the Hawaiian Department will be held there for the present.

54. Physical examination.—This will include inspection, palpation, percussion and auscultation of the chest.

a. Structural abnormalities of the thoracic wall and striking rapidity, limitation, or inequality of the respiratory movements are to be noted.

b. Abnormal physical signs in the lungs, pleura, or mediastinum will be carefully checked to ascertain whether they persist or are only transitory.

c. Particular attention will be focused upon the occurrence of pulmonary rales, which may be elicited only after the expiratory cough. The subject will be instructed to exhale completely with the mouth open, immediately to cough before inhaling, and then to inhale deeply but quietly. Rales are heard most often at the beginning of inhalation after such an expiratory cough. A small patch of persistent rales at the apex, in the interscapular area, or in some other part of the chest may be the only evidence of tuberculosis shown by physical examination.

d. It must be borne in mind that some tuberculous lesions may not produce abnormal physical signs. In other words, normal signs do not exclude tuberculosis.

e. The attention of examining physicians is particularly directed to the necessity of exercising great conservatism in their interpretation of physical signs over the apices. Misinterpretation of such signs as an indication of active tuberculosis would in many cases do the Government an injustice by leading to the exclusion of men who are fit for service.

f. Certain signs which may arouse suspicion but, unless X-ray and other studies reveal definite evidence of disease, will be disregarded are—

(1) Slightly harsh breath sounds and slightly prolonged expiration over the right apex above the clavicle and the third thoracic spine and/or the same signs at the extreme left apex.

(2) Slight alteration of the breath sounds anywhere in the chest, without other abnormal signs.

(3) Clicks or crepitations which disappear after a few deep breaths or coughs.

55. Other examinations.—It may be necessary to postpone decision in some cases until special studies and adequate observation have been completed. For example, subacute bronchopneumonia in an upper lobe of the lung may simulate tuberculosis, but proper laboratory studies of the sputum and blood and another X-ray and physical examination after 3 or 4 weeks usually suffice to make the differential diagnosis.

56. General service.—*a.* Acute bronchitis, provided acceptance is temporarily deferred until a final examination shows recovery without disqualifying sequelae.

b. Acute or subacute pneumonia, provided acceptance is deferred until a final examination shows recovery without disqualifying sequelae.

c. Scars of operation for nontuberculous empyema which have been healed for one year or longer, provided the function of the lung is good. X-ray and physical examination may show some fibrous thickening of the pleura but no evidence of any sacculation or other residue of the empyema.

d. Acute or subacute fibrinous pleurisy, *definitely nontuberculous in origin*, provided acceptance is temporarily deferred until a final examination shows recovery without disqualifying sequelae. Such pleurisy usually is suspected or demonstrated on physical examination, not on X-ray examination.

e. Fibrous pleural scars and adhesions, revealed most often in the roentgenogram by isolated roughening or peaking of an interlobar fissure or of the apical pleura, provided there is no evidence of tuberculosis of the pulmonary parenchyma beyond the limits defined in *f* below.

f. (1) Apparently healed intrathoracic tuberculous lesions of slight extent demonstrable in the roentgenogram but producing no audible rales after the expiratory cough during physical examination.

(2) The following specifications of the limits of such lesions are intended to exclude persons with disease which is most likely to be in part caseous and therefore potentially hazardous. The limits are set arbitrarily to provide an objective basis on which the examiner may render a decision. All measurements refer to single, standard 14- by 17-inch direct-projection roentgenograms. These lesions may consist of—

(*a*) Calcified residues of lesions of the intrathoracic lymph nodes, provided none of these exceeds an arbitrary limit of 1.5 cm in diameter and the total number of such lesions does not exceed five.

(*b*) Calcified lesions of the pulmonary parenchyma, provided the total number of these does not exceed ten; and one of these may equal but not exceed 1 cm in diameter; but none of the remainder may exceed 0.5 cm in diameter. In the roentgenogram such calcified lesions should appear isolated, sharply circumscribed, homogeneous, and dense.

(3) The above arbitrary limits of calcified lesions are set on the assumption that large and numerous lesions are more likely to be partially unhealed, and therefore a potential source of future recrudescence, than small lesions of limited distribution. It is recognized, however, that in some individuals calcified tuberculous lesions exceeding these limits may be present which are so well healed that the possibility of future reactivation is remote. Further consideration may be given to the acceptability of persons with calcified lesions of this type when the state of health in all other respects clearly warrants the opinion that the lesions in question are healed. In such cases the history of the applicant and his age, as well as the character of the lesions as seen in X-ray films provide criteria for estimating the probability of complete arrest of the tuberculous process. If there is no history of active tuberculosis or symptoms which might be interpreted as evidence of this disease and if the applicant is more than 25 years of age, and if finally the calcified lesions seen are dense and discrete in character and not hazy or irregular in outline, such lesions may be considered as not prejudicial to future health. In these cases the applicant may be accepted provided the report of physical examination and the chest X-ray films have been reviewed and acceptance has been recommended by a medical examiner qualified in chest diagnosis.

g. Fracture of the rib or ribs, provided acceptance is temporarily deferred until a final examination shows recovery with or without deformity and provided the residual deformity if any does not interfere seriously with respiratory movements.

h. Benign tumors of the breast or of the chest wall, provided the mass does not interfere with the wearing of a uniform or military equipment.

i. Small palpable lymph nodes of the axilla which apparently are not evidence of active disease.

57. Limited service.—*a*, Deformity of clavicle, ribs, or scapula of a degree disqualifying for general military service but not preventing the individual from successfully following a useful vocation in civil life.

b. Chronic bronchitis which is mild and not associated with emphysema.

58. Nonacceptable.—Disqualifying defects such as—

a. Tuberculosis of the lungs or tracheobronchial lymph nodes except as defined in paragraph 53*f*.

b. Small fibroid lesions represented in the roentgenograms as sharply demarcated strandlike or well-defined, small, nodular shadows not exceeding a total area of 5 square cm will be deferred until subsequent examination demonstrates that the lesion is stationary and not likely to be reactivated. The minimum period of time to determine this is 6 months. It must be recognized that either progression or regression of the lesion indicates instability. Clinical judgment, taking into consideration other factors, including age and race, must be exercised in estimating the likelihood of reactivation. Experience indicates a greater likelihood of reactivation of a lesion that appears to be stable in persons under 25 years of age than in older persons.

c. Fibrinous or serofibrinous tuberculous pleurisy, and serofibrinous pleurisy of unknown origin. Inasmuch as pleurisy, with or without effusion, is a very frequent manifestation of active tuberculosis, all persons who have apparently recovered from pleurisy will be examined with the greatest care. Chronic fibrous pleurisy sufficient to cause marked retraction of the chest wall and of the mediastinal organs or to cause a density in the roentgenogram which completely obscures a considerable section of the pulmonary markings will be considered disqualifying.

d. Empyema or unhealed sinuses of the chest wall following operation for empyema.

e. Chronic bronchitis with emphysema.

f. Bronchial asthma.

g. Pulmonary emphysema with impairment of function.

h. Cystic disease of the lung.

i. Silicosis as represented in the roentgenogram by strandlike and nodular shadows or any other form of severe pulmonary fibrosis.

j. Abscess of the lung.

k. Bronchiectasis.

l. Active mycotic disease of the lung and residual cavitation due thereto.

m. Tuberculosis of the ribs and other parts of the chest wall.

n. Any malignant tumor of the breast or the chest wall.

o. Tumor of the lung, pleura, or mediastinum.

p. Spontaneous pneumothorax.

q. Foreign body in the lung. A person may be accepted after a foreign body has been removed from a bronchus, provided examination shows recovery without disqualifying sequelae.

r. Benign tumors of the breast or of the chest wall of such size and location as to interfere with the wearing of the uniform or military equipment.

59. General considerations.—Examining physicians will not reject without confirmatory evidence persons who allege tuberculosis as a ground for exemption or discharge. Some enlisted men may allege symptoms of tuberculosis with a view of securing discharge. Some persons may be expected to claim the existence of tuberculosis as a ground for exemption and fortify their claims by certification of physicians. Such certificates will not necessarily be accepted, but examining physicians will satisfy themselves as to the physical qualifications by their personal examinations. There will be cases in which pulmonary tuberculosis will have been previously diagnosed on the ground of subjective symptoms and of physical signs which are without any pathological significance. It is necessary, therefore, that conclusions of examining physicians be based on their own findings and their own evaluation of the case. Statements of the individual as to symptoms will not be accepted as an indication of the existence of tuberculosis unless supported by objective evidence. Roentgenograms of the chest made previously may be accepted as part of the objective evidence, provided their authenticity is satisfactorily established. On the other hand, men who desire to serve their country may conceal, from patriotic motives, symptoms of tuberculosis which they know or suspect to exist. Some tuberculous individuals may seek enlistment with a view of obtaining treatment and a pension.

SECTION XIV

HEART, BLOOD VESSELS, AND CIRCULATION

60. History.—Questions will be asked during the course of the examination concerning past history of rheumatic fever, chorea, spells of rapid heart action, syphilis, and reaction to physical effort which may be helpful in the interpretation of the findings, but chief reliance will not be placed on the history alone.

61. Procedure.—The following procedure will govern in the physical examination of the heart. Only those findings need be recorded which are indicative of disease or anatomical defect (examples of findings which are usually not indicative of disease are extra-systoles and functional pulmonary systolic murmurs). For the information of the examiners it is suggested that reference be made to the publication adopted and distributed by the American Heart Association entitled "The Nomenclature and Criteria for the Diagnosis of Diseases of the Heart."

a. Location of apex impulse and determination of character.

b. Auscultation of the heart sounds over apex, lower sternum, and second and third interspaces to right and left of sternum, noting accentuation of sounds, the presence of murmurs, rate and rhythm. Compare the heart rate with the radial pulse rate.

c. Inspection of root of neck and upper thorax followed by percussion of first interspace on each side of the manubrium for evidence of aneurysm.

d. Count of radial pulse, observation of its rhythm, and palpation of radial arteries for unusual thickening or high tension.

e. The blood pressure will be routinely measured. It will be determined with the subject in the sitting position. If orthostatic hypotension is suspected, the blood pressure will also be measured while the subject is standing. If the blood pressure appears to be abnormally high, it will be measured after the subject has rested in the recumbent position. When measured in other than the sitting position, a statement will be appended as to the position of the subject at the time of measurement.

f. Exercise test (stepping 12 times briskly upon a common chair) will be used in selected cases to bring out significant heart murmurs but this test in itself is not to be considered a reliable estimate of the functional capacity of the heart.

g. If in doubt about an unexplained tachycardia take the temperature. Fever that is sometimes not very obvious can account for otherwise unexplained tachycardia.

h. If there is doubt as to the presence of cardiovascular disease, the individual will return for detailed reexamination.

62. General service.—*a.* A heart will be considered normal when the apex impulse is within the left midclavicular line and not below the fifth interspace;

when sounds are normal and there are no thrills or important murmurs; when there is no abnormal pulsation or dullness above the base of the heart; when pulse rate is normal and regular and there is no unusual thickening of the arteries or significant elevation of blood pressure.

b. A pulse rate of 100 or over which is not persistent and not due to paroxysmal tachycardia. (A pulse rate of 100 or over may be temporary and due to excitement or to recent infection, such as pneumonia or local infections about the nose, mouth, and throat, or may be induced by drugs.)

c. A pulse rate of 50 or under which is proved to be the natural pulse rate of the individual or to be temporary or due to the use of drugs. (If the bradycardia is physiological, the rate on exercise will rise to a higher level and then gradually return to the original slow rate; whereas when heart block is present the rate on exercise will either change slightly or not at all or sudden interruptions in the length of the heart cycle will be detected.)

d. Sinus arrhythmia. (This consists in a quickening of the pulse rate during inspiration and a slowing during expiration and is best recognized with the individual recumbent and breathing deeply.)

e. Elevation of blood pressure from excitement, proved to be temporary.

f. Neurocirculatory asthenia, if very mild in degree.

63. Limited service.—There are no cardiovascular criteria to warrant initial selection for limited service.

64. Nonacceptable.—*a.* Circulatory failure evidenced by definite symptoms such as undue breathlessness, pain, or evidence of congestive failure (engorged neck veins, enlarged liver, edema, as well as dyspnea).

b. Hypertrophy and/or dilatation of the heart evidenced by displacement of the apex impulse to the left of the midclavicular line or below the sixth rib, and of a heaving or diffuse character, or by X-ray evidence.

c. A persistent heart rate of 100 or over when this is proved to be persistent in the recumbent posture and on observation and reexamination over a sufficient period of time. See also section XXI.

d. Paroxysmal tachycardia. See also section XXI.

e. Heart block.

f. Any serious disturbance of rhythm such as auricular fibrillation.

g. Valvular disease.

h. Congenital heart disease.

i. Persistent blood pressure at rest above 150 mm systolic or above 90 diastolic, unless in the opinion of the medical examiner the increased blood pressure is due to psychic reaction and not secondary to renal or other systemic disease.

j. Thrombophlebitis of one or more extremities if there is a persistence of the thrombus or any evidence of circulatory obstruction in the involved vein or veins.

k. Other abnormalities of the peripheral vascular system, including large varicose veins, Raynaud's disease, Buerger's disease (thromboangiitis obliterans), erythromelalgia, and arteriosclerosis. In doubtful cases special tests should be employed.

l. Aneurysm of any vessel.

m. Pericarditis.

n. Acute endocarditis.

o. True angina pectoris.

p. Coronary thrombosis.

q. Neurocirculatory asthenia (effort syndrome), unless very mild. Usual symptoms of this condition are exhaustion, breathlessness, heartache, and palpitation. These symptoms may follow exertion such as would not produce them in healthy individuals. These, and other symptoms such as dizziness or fainting, may arise without evidence of organic disease sufficient to account for the disability of the individual. Cases of effort syndrome may be divided into four groups. (In some cases more than one of these factors is present.)

(1) As an accompaniment of organic heart disease.

(2) Following infections.

(3) In individuals with poor physique or insufficient training for the work required.

(4) *Orthostatic hypotension or tachycardia.*—The blood pressure and pulse rate will be taken with the individual in the recumbent position and after standing 3 minutes. An increase in a normal recumbent pulse rate to 120 beats per minute or more when the individual stands or a decrease of a normal blood pressure (when the individual is recumbent) to values less than 90 systolic and 60 diastolic when the individual stands may be considered evidence of a definite physiologic disturbance and in itself cause for rejection unless the condition is very temporary following an illness, operation, or exhausted state.

65. Electrocardiogram.—The electrocardiogram is of great assistance in determining the nature of certain cardiac abnormalities, the most important of which are the various arrhythmias, defects in conduction, and diseases of the coronary arteries. The electrocardiograph may be utilized in cases where such diagnostic aid is especially indicated but will not be employed as a routine measure.

66. X-ray.—In doubtful cases, fluoroscopy and teleroentgenography is advised to determine the size and shape of heart and great vessels. Films taken for the study of the lungs will also be viewed for cardiovascular defects.

67. General considerations.—*a.* It is incumbent upon examining physicians—

(1) To accept for service men with functional murmurs or other findings which do not indicate disease and do not impair the individual's ability to undergo severe bodily exertion.

(2) To exclude from active service in the Army any individual affected with disease of the heart or blood vessels which impairs his ability to undergo severe bodily exertion. Although many men with compensated valvular heart disease are able to undergo severe bodily exertion, the question of aggravation in service, especially by activation of rheumatic carditis, is likely to arise and incidentally to create a pension problem. Therefore, all individuals with valvular heart disease are to be regarded as unfit for service and will be rejected.

b. Men who desire to serve their country may, from patriotic motives, endeavor to conceal a known valvular lesion which has given no symptoms. On the other hand, men drafted for service may allege or feign symptoms to obtain exemption. Individuals may be expected to present physicians' certificates to substantiate the existence of valvular disease. Many of these may be given in good faith because of inadequate knowledge of the significance of certain physiological murmurs. Such certificates will not be accepted but examiners will satisfy themselves by their personal examinations as to the physical qualifications of individuals.

c. It is necessary, therefore, that the conclusions of the examining physician in doubtful cases be based on objective evidence in the widest sense, including physical signs, cardiac rhythm, measurement of blood pressure, and the observed effect of effort. Nevertheless, in the presence of questionable signs or symp-

toms, the history, especially of rheumatic fever, may be a factor in the final decision. No statement, however, will be accepted as proof of the existence of a cardiovascular defect unless supported by objective evidence.

d. It is the duty of examining physicians to protect the interest of the Government by preventing the entrance into the service of men whose circulatory systems may be expected to break down under the strain. It is also their duty to prevent the exemption or discharge of fit subjects because of unimportant deviations from the normal. They will exercise care in the interpretation of their findings and bear in mind constantly accidental murmurs and other departure from the supposed normal which may occur in perfectly healthy hearts.

Section XV

ABDOMINAL ORGANS AND WALL

68. General service.—*a.* Abdominal scars due to surgical operation or accident which show no hernial bulging.

b. Scar pain when found not associated with any disturbance of function of abdominal wall or contained viscera.

c. Achylia gastrica, unless associated with a disqualifying disease.

d. Complaint of "weak stomach," indigestion, dyspepsia, constipation, belching, vomiting, and various other types and degrees of abdominal discomfort unless proven to have an organic basis by a carefully elicited history, physical examination, and such laboratory tests as may be employed or by a trustworthy medical record from a competent physician or clinic, provided neuropsychiatric examination reveals no disqualification.

e. Blood in stools, if proved to be due to slight defects such as shallow fissures of the anus, small hemorrhoids, or superficial small ulcers of the rectum.

f. Mild enlargement of the liver unassociated with other objective evidence of disease of the liver or other organs.

g. Splenic enlargement of mild degree unassociated with evidence of other disqualifying disease.

h. Small benign tumors of the abdominal wall.

i. Intestinal parasites or their eggs in the stools.

j. Internal and external hemorrhoids, if mild in degree.

k. Relaxed inguinal ring provided there is no hernial sac present.

l. Hernia, small umbilical (patent umbilical ring).

m. History of cholecystectomy provided there are no residual disqualifying sequelae.

69. Limited service.—Unless the degree of disability is obviously disqualifying—

a. Authentic history of gastric or duodenal ulcer, provided there is a trustworthy history of freedom from activity during the past 5 years and provided that gastrointestinal X-ray made at the time of examination is negative.

b. Large benign tumors of the abdominal wall.

c. Internal and external hemorrhoids, moderate.

70. Nonacceptable.—Defects such as—

a. Hernia, inguinal, femoral or postoperative. Umbilical hernia, if moderate or large in size.

b. Chronic cholecystitis with or without cholelithiasis, if diagnosis is confirmed by usual laboratory procedures or authentic medical history.

c. Ulcer of the stomach or duodenum, if diagnosis is confirmed by the usual laboratory procedures or authentic medical history; also authentic history of gastric or duodenal ulcer with activity within the past 5 years.

d. Surgical operations for gastric or duodenal ulcer.

e. Intestinal obstruction of any kind.

f. Sinuses of the abdominal wall.

g. Stricture of the rectum.

h. Fistula in ano.

i. Schistosomiasis.

j. Enlargement of the spleen associated with leukemia, Hodgkin's disease, or splenic anemia.

k. Great enlargement of the spleen from any cause.

l. Large internal and external hemorrhoids with or without prolapse of the rectum.

m. Megacolon, diverticulitis, and ileitis.

71. General considerations.—*a.* When necessary to confirm a diagnosis, examining physicians will avail themselves of fluoroscopy and roentgenography.

b. When examining physicians are able to command hospital facilities and the necessary diagnostic apparatus, they will, within their discretion, use test meals and chemical and microscopic examination of the stomach contents and stools.

c. Examining physicians will make use of digital rectal examination of defects referable to that region and, when necessary, proctoscopy will also be utilized.

d. Individuals who are found to have parasites or their eggs in stools will have this condition indicated on report of examination.

e. Moderate impulse produced by cough at the inguinal, femoral, or umbilical rings, or at the site of a scar is not necessarily indicative of hernia.

f. In cases of suspected gastric or duodenal ulcer every effort will be made to obtain a trustworthy history, including authentic medical records.

Section XVI

GENITO-URINARY ORGANS AND VENEREAL DISEASES

72. General service.—*a.* Gonorrhea, uncomplicated, acute or chronic; syphilis, except cardiovascular, cerebrospinal, or visceral syphilis; uncomplicated chancroid. (Acceptance of individuals with these conditions by Army examining boards at the initial examination will be deferred until facilities have been provided for their care and instructions for their acceptance have been issued by the War Department.)

b. History of bed wetting, unless substantiated by physician's affidavit or by other acceptable documentary evidence.

c. Mild albuminuria with or without casts which is proved by observation and repeated examination to be temporary in character or orthostatic in type.

d. Absence of one testicle unless removed on account of malignant disease or tuberculosis.

e. Undescended testicle which lies within the abdominal cavity.

f. Phimosis with or without adhesions of the mucous surfaces.

g. Benign warts and other benign growths of the glans penis and of the prepuce.

h. Amputation of the penis, if a sufficient amount of the organ remains so as not to interfere with the function of micturition. (Care will be taken to examine fully individuals for possible recurrence of a disqualifying disease for which the amputation may have been made.)

i. Varicocele of moderate size.

j. Hydrocele of moderate size.

k. Epispadias or hypospadias, if mild in degree.

l. History of unilateral renal calculus with freedom from symptoms and if the X-ray is negative for calculi.

73. Limited service.—*a.* Stricture of the urethra unless severe.

b. Floating kidney. (Floating kidney is one which is freely moveable.)

c. Undescended testicle which lies within the inguinal canal.

d. Removal of one kidney, unless due to malignant disease, renal calculus, or tuberculosis, the remaining kidney being healthy.

74. Nonacceptable.—*a.* Acute or chronic nephritis.

b. Stricture of the urethra, severe.

c. Urinary fistula or incontinence.

d. Gonorrheal arthritis.

e. Surgical kidney with or without renal calculus.

f. The presence of renal calculus, or a substantiated history of bilateral renal calculi at any time.

g. Chronic pyelitis.

h. Hydronephrosis or pyonephrosis.

i. Tumors of the kidney, bladder, or testicle.

j. Chronic cystitis.

k. Amputation of the penis, if the resulting stump is insufficient to permit normal function of micturition.

l. Hermaphroditism.

m. Hypertrophy of the prostate gland.

n. Epispadias or hypospadias when urine cannot be voided in such a manner as to avoid soiling of clothing or surroundings, or when accompanied by evidence of chronic infection of the genito-urinary tract.

o. Cardiovascular, cerebrospinal, and visceral syphilis.

p. Bed wetting, if substantiated by physician's affidavit or by other acceptable documentary evidence.

q. Varicocele, if large.

r. Hydrocele, if large.

s. Granuloma inguinale.

t. Lymphogranuloma venereum.

75. General considerations.—*a. Urinalysis.*—(1) Routine urinalysis to include determination of specific gravity and the absence or presence of albumin and sugar will be done on all individuals. Microscopic study of the urine will be done when indicated. Examining physicians should require examinees to void

the urine in their presence. It must be emphasized here that prior to voiding the examinee must be examined for the presence of venereal disease. When albumin and/or casts are found in the urine, urinalysis should be repeated not less than twice a day on 2 or more successive days. If the urine shows albumin and/or casts and this condition of the urine is associated with enlargement of the heart, high blood pressure and other evidences of cardiovascular-renal disease, the diagnosis of chronic nephritis may be made immediately. If the presence in the urine of albumin and/or casts is proved to be inconstant and if the condition is unassociated with evidence of cardiovascular and/or renal disease, decision should lie within the judgment and discretion of the examining physicians. When blood is found in the urine a thorough study will be made to determine the underlying cause.

(2) When it is deemed necessary, examining physicians will employ X-ray facilities to verify diagnosis of defects of the genito-urinary organs.

b. Serological test for syphilis.—(1) All applicants for voluntary enlistment and Selective Service registrants will be subjected to a serological test for syphilis.

(2) All individuals giving a positive serum reaction for syphilis will after a minimum period of 5 days be subjected to another test to confirm a previously positive reaction.

(3) In the case of applicants for voluntary enlistment the serological test for syphilis will be performed prior to acceptance whenever practicable. Individuals of this group on whom it has not been practicable to obtain a serological test for syphilis prior to enlistment will be subjected to this test on arrival at their first station. In order to insure that all individuals voluntarily enlisting will have a serological test for syphilis as indicated above the date of the test and the result will be recorded in the space "Carrier Examinations" on page 1 of the W. D., A. G. O. Form No. 24 (Service Record).

Section XVII

ENDOCRINE AND METABOLIC DISORDERS

76. General service.—*a.* Simple colloid goiter, provided the enlargement of the thyroid will not interfere with the wearing of a uniform or military equipment.

b. Fröhlich's syndrome, if mild in degree.

c. Hypothyroidism, if mild.

d. Acromegaly, if not severe or associated with symptoms other than the bony changes.

e. Glycosuria, if transient in type, provided acceptance is deferred until the possible existence of diabetes mellitus and renal glycosuria are excluded.

77. Limited service.—*a.* Fröhlich's syndrome, if moderate in degree.

b. Pellagra, beriberi, scurvy, and other nutritional deficiencies, if mild and remediable by diet and appropriate treatment.

78. Nonacceptable.—*a.* Toxic goiter. (It should be remembered that malingerers may use thyroid medication to produce many of the symptoms of thyrotoxicosis.)

b. Simple goiter with definite pressure symptoms or so large in size as to interfere with wearing a uniform or military equipment.

c. Cretinism with imbecility or dwarfism.

d. Myxedema (with clinical manifestations and diagnosis not based solely on low basal metabolic rate).

e. Gigantism or acromegaly, if markedly disfiguring or if associated with other symptoms of severe pituitary dysfunction.

f. Fröhlich's syndrome, if severe.

g. Hyperparathyroidism and hypoparathyroidism when the diagnosis is supported by adequate laboratory studies.

h. Addison's disease.

i. Diabetes mellitus. If sugar is found in the urine, further specimens should be voided in the presence of the physician or authorized assistant, and on more than one occasion. In doubtful cases the blood sugar should be determined. Consideration will be given to authentic medical records indicating the existence of diabetes mellitus.

j. Diabetes insipidus. (Before diabetes insipidus is diagnosed, malingering by drinking large quantities of water will be excluded.)

k. Renal glycosuria.

l. Nutritional deficiency diseases (including sprue, beriberi, pellagra, and scurvy) which are severe or not readily remediable or in which permanent pathological changes have been established.

m. Gout.

n. Simmonds' disease.

o. Cushing's syndrome.

p. Hyperinsulinism when established by adequate investigation and if regarded by the examiners as of sufficient degree to disqualify for military service.

Section XVIII

DISEASES OF BLOOD AND BLOOD-FORMING TISSUES

79. General service.—Secondary anemia, mild, due to easily remediable causes.

80. Limited service.—There are no diseases of this group which warrant initial selection for general service.

81. Nonacceptable.—*a.* Hemophilia.

b. Thrombocytopenic purpura.

c. Primary pernicious anemia.

d. Aplastic anemia.

e. Hemolytic ictero-anemia (hemolytic jaundice).

f. Splenic anemia.

g. Polycythemia vera.

h. Leukemia, acute or chronic, of any type.

i. Malaria, chronic, if severe.

j. Sickle cell anemia.

SECTION XIX

NEUROLOGICAL DISORDERS

82. Methods of examination.—*a.* In order to detect the presence of certain common neurological diseases, particularly epilepsy, post-encephalitic and post-traumatic syndromes, multiple sclerosis, drug addiction, and hysteria, information regarding the life history of the individual is essential. Therefore, examination will be made concerning convulsions, fainting spells, attacks of unconsciousness, routine use of any medicines, hospitalization, severe head injury, and educational and occupational history.

b. The neurological examination will be conducted as follows: The individual will be examined stripped. He will walk a straight line at a brisk pace with his eyes open, stop, and turn around. He will then return in the same manner with his eyes closed, stop, and turn around. Look for spastic, ataxic, incoordinate or limping gait; absence of normal associated movements; deviation to one side or the other; the presence of abnormal involuntary movements; undue difference in performances with the eyes open and closed. The individual will then stand erect, feet together, arms extended in front. Look for unsteadiness and swaying, deviation of one or both of the arms from the assumed position, tremors, or other involuntary movements. With eyes closed he will then touch his nose with the right and then the left index finger. Look for ataxia, tremors, overshooting, particularly at the end of the movement. Examine joint and spine movement and muscle condition. Look for muscular atrophy or pseudohypertrophy, muscular weakness, limitation of joint movement and spine stiffness. As to pupils, look for irregularity, inequality, diminished or absent contraction to light; movements of eyes, facial muscles, and tongue. Look for strabismus, ptosis, sustained nystagmus, tremors of retracted lips, asymmetry or tremors of face or tongue. Sensation will be examined by pricking lightly each side of the forehead, bridge of nose and chin, across the volar surface of each wrist, and dorsum of each foot. Look for inequality of sensation right and left. If these sensations are abnormal, vibration sense should be tested at ankles and wrists by tuning fork. With the eyes closed, he will run each heel from the opposite knee to the ankle. Test sense of movement of great toes and thumb. Look for diminution or loss of vibration and sense of position, and ataxia. Knee jerks and plantar reflexes should be tested. When indicated, appropriate laboratory tests and X-ray examinations will be made.

83. General service.—These registrants present—

a. A healthy nervous system as manifested by absence of signs of disease of the brain, spinal cord, cranial and peripheral nerves.

b. Certain variations clearly within physiological limits such as minor tremors.

c. Inconsequential paralyses resulting from old poliomyelitis or lesions of the peripheral nerves not likely to interfere with military duties.

84. Limited service.—Individuals with local paralyses due to old poliomyelitis or nonprogressive disease of the peripheral nerves of such marked degree

that they disqualify for general military service but have not prevented the individual from successfully following a useful vocation in civil life.

85. Nonacceptable.—Any serious neurological disorder such as—

a. Neurosyphilis of any form (general paresis, tabes dorsalis, meningo-vascular syphilis).

b. The epilepsies.

c. Paralysis agitans, post-encephalitic syndromes, athetosis, chorea, spasmodic torticollis, familial ataxia.

d. Post-traumatic cerebral syndrome.

e. Multiple sclerosis, encephalomyelitis.

f. Diffuse muscular atrophies or dystrophies of any type (with the exception of extremely mild residuals of poliomyelitis).

g. Chronic or recurrent neuritis or neuralgia of an intensity sufficient to prevent the individual from following a useful vocation in civil life. Multiple neuritis.

h. Cerebral arteriosclerosis, vascular accidents of all types.

i. Spina bifida, if associated with neurological manifestations. Meningocele, even if uncomplicated.

j. Other chronic degenerative diseases of the brain and spinal cord.

86. Diagnostic criteria.—The following brief summary of diagnostic criteria is intended as a general guide for examiners. It includes the common manifestations of the more usual neurological disorders, but it is not intended to cover all diagnostic criteria or all neurological disorders.

a. Syphilis of central nervous system.—(1) *General paresis or meningo-encephalitic syphilis.*—Look for unequal, irregular or sluggishly reacting pupils or Argyll-Robertson pupil; facial tremor; speech defect in test phrases and in the slurring and distortion of words in conversation; writing defects consisting of omissions and distortions of letters; defective memory; discrepancies in relating facts of life; inability to perform quickly and accurately simple problems of addition and subtraction in mental arithmetic. Knee jerks may be normal or overactive or underactive. The mood may be apathetic, depressed or euphoric; other psychiatric symptoms may be of a schizophrenic or neurasthenic type.

(2) *Meningo-vascular or cerebrospinal syphilis.*—The prominent diagnostic signs and symptoms are headaches, history of mood changes or convulsions, varying deep and superficial reflexes, pupillary changes, ptosis, ocular palsies, and facial paresis. The mental state is normal, dull, or apathetic. Motor weakness may occur on one side of the body or in one extremity.

(3) *Tabes dorsalis* (*locomotor ataxia*).—Look for unequal, irregular, or sluggishly reacting pupils or Argyll-Robertson pupil; absent knee jerks; positive Romberg; ataxic gait, especially when the eyes are closed; hypotonia; and anesthetic areas of the skin. The history, usually of slow progression, may show failing sexual power or sphincter disturbances and pains in the legs or back, usually an irregular series of short, identical attacks of pain coming at intervals.

b. Epilepsies.—Look for deep scars on tongue, face, and head. Since no physical findings are pathognomonic, it is necessary to discover if the individual has had spells of unconsciousness, convulsions, "fits," "falling out" spells, "lapses," "dizziness," or "fainting." The individual will be disqualified on a verified history of such spells or of multiple attacks of loss of consciousness, especially with incontinence or twitching, or of frequent momentary episodes of being dazed, or of uncontrollable outbursts of rage or irrational conduct, or fugues, or treatment with anticonvulsive drugs over a long period of time. Such a history will

be verified, if practicable, by a confirmatory medical record from a trustworthy source. *When a registrant is rejected for epilepsy a statement will be made by the examining board giving the basis for the diagnosis. In the absence of stigmata or a verified history and diagnosis is based wholly on the registrant's statement, it will be so stated.*

c. Paralysis agitans.—Paralysis agitans is recognized by frozen facies, unwinking stare, rigidity of the muscles, stooped posture, slowness of movement, tremors, slow, monotonous speech, etc. It may be unilateral. A history of encephalitis or influenza is obtained in only about one-half the cases. Even mild manifestations disqualify.

d. Athetosis, dystonia, torticollis, chronic chorea.—These are names given to various types of irregular, intermittent involuntary movements, affecting various parts of the body, often associated with evidence of spastic paralysis. Simulation is possible and in doubtful cases previous medical records should be sought. Even mild manifestations disqualify.

e. Post-traumatic cerebral syndrome.—A history of head injury followed by headache, dizziness, loss of initiative or change of personality is suggestive; but independent confirmation of such alterations should be sought if possible. A dull apathetic expression, slight nystagmus, fine tremors, vasomotor changes, abnormal sweating, etc., are confirmatory evidence. If the syndrome is definite, even though mild, the individual should be rejected. The presence of signs indicating a focal lesion, even though mild, is also cause for rejection. See paragraph 37.

f. Multiple sclerosis.—A history of transitory weakness, numbness, ataxia of one or more extremities, transient diplopia, scotomata or bladder disturbances should arouse a suspicion of multiple sclerosis. The presence of optic atrophy, scotomata, definite nystagmus, corneal hypesthesia, absence or irregularity of abdominal jerks, exaggerated deep reflexes, a Babinski or similar signs, or ataxia and euphoria are common manifestations.

g. Muscular dystrophies.—There is atrophy of the muscles in some forms, hypertrophy in others, and, in general, decrease or loss of muscle power. In the pseudohypertrophic form some muscles are atrophied, others hypertrophied. In myasthenia gravis there is rapid fatigue of muscle power, appearing first in the facial and extrinsic eye muscles and later becoming generalized.

h. Chronic neuralgias.—A history of severe constant or recurrent pain, confined to the area of distribution of a single nerve or segment, without objective changes, suggests this diagnosis. Clearly defined entities are sciatic and trigeminal neuralgias. Less common are suboccipital, brachial and glossopharyngeal neuralgias. Neuralgias of other nerves are extremely rare and the diagnosis will be made with extreme caution. Neuritis, arthritis, bursitis, sinusitis, etc., and also hysteria and malingering must be considered in differential diagnosis. Evidence of previous treatment and the injection of procaine into the nerve presumably affected are important diagnostic aids.

i. Multiple neuritis.—This may be associated with the dietary deficiencies, infection, or intoxication. The symptoms depend upon the cause and duration. They consist of pain, various combinations of diminution or loss of motor power most marked in the distal part of the extremities, sensory diminution or loss, tenderness of the muscles and nerves, loss or diminution of reflexes.

j. Cerebral vascular accidents.—Characteristically, the onset is acute, with or without unconsciousness. Almost any focal disturbance may result. Evidence or peripheral arterial disease may be inconspicuous. The diagnosis disqualifies.

SECTION XX

PSYCHOSES, PSYCHONEUROSES, PERSONALITY DISORDERS

87. **General considerations.**—The detection of disorders of the personality is often most difficult and the general fitness of the individual for military life should be considered at the end of the medical investigation. At the time of examination there may be no obvious defects such as present themselves in other pathological conditions. Each examiner will constantly be on the alert throughout his contact with the individual to detect any sign of such disorders and will promptly report suspicious symptoms he may note to the chief examiner. (See par. 2*b*.) Every effort must be made to reject the mentally deficient and those showing evidence of nervous instability. The mentally deficient and unstable are always a detriment to the Army from the day they are accepted until they are separated from the service. Such men will under no circumstances be accepted.

88. **Routine procedure.**—*a*. The diagnosis of most psychiatric disorders depends in the first place upon the examiner's estimate of the person's behavior and response to the situation of the examination and in the second place upon an adequate history, supplemented if necessary by information gathered from the individual's own physician, courts, hospitals, social service or welfare agencies, etc.

b. Routinely, examiners will be on the watch for any of the following personality deviations: inability to understand and execute commands promptly and adequately, abnormal negativistic attitude, abnormal anxiety, silly inappropriate laughter, instability, seclusiveness, sulkiness, sluggishness, discontent, lonesomeness, depression, shyness, suspicion, overboisterousness, timidity, personal uncleanliness, stupidity, dullness, resentfulness to discipline, a history of nocturnal incontinence, sleeplessness, lack of initiative and ambition, sleepwalking, recognized queerness, suicidal tendencies either bona fide or feigned, and homosexual proclivities.

c. Abnormal autonomic responses (fainting, blushing, excessive sweating, shivering or gooseflesh, excessive pallor or cyanosis of the extremities) are also occasionally significant. Note also the lack of such normal anxiety or autonomic responses as might reasonably be expected under the circumstances.

89. **Minimum psychiatric examination.**—*a*. Mental and personality difficulties are most clearly revealed in the subject's behavior toward those with whom he feels relatively at ease. The most successful approach is often one of straightforward professional inquiry coupled with real respect for the individual's personality and due consideration for his feelings—which does not mean diffidence.

b. The psychiatric examination will be made outside of easy hearing of other men. Matter of diagnostic significance is often concealed when the indi-

vidual feels that he must be impersonal and give replies that will not impress listeners with his peculiarity.

c. Questioning will begin with something that is obviously relevant to the immediate situation. One tries to elicit the difficulties which the individual has been experiencing in his relations with others and himself in his work and in his spare time activities. The examiner pays close attention to content and implication of everything said and to any other clues and, in a matter-of-fact manner, follows up whatever is not self-evidently commonplace.

d. The probable presence of some types of psychiatric disorders—in particular the major psychoses and marked degrees of feeble-mindedness—may often be suspected by alert observation of the individual's behavior if the examiner knows what to look for and what to regard as significant. In other cases one would not be able to suspect the presence of any morbid condition without some knowledge of the individual's history.

90. General service.—*a.* The range of personalities usually classed as "normal."—Evidence of ability to get along tolerably with family, friends, casual acquaintances, authorities in school or society, employers, and fellow workers. Conventional attitude toward sexual problems. Sufficient intelligence to graduate from grammar school unless prevented by external circumstances. Sufficient stability and ability to obtain and keep, or at least to seek, a job.

b. Marginal intelligence, if compensated for by better than average stability.

c. Men whose speech can readily be understood, even though there is a moderate degree of stuttering or stammering, if otherwise physically, intellectually and emotionally fit.

91. Limited service.—*a.* Moderate degrees of compulsiveness or obsessiveness.

b. Stuttering and stammering of a degree disqualifying for general military service but which has not prevented the man from successfully following a useful vocation in civil life.

92. Nonacceptable.—Individuals who are found to have any serious mental or neurological disorder such as—

a. Mental deficiency.

b. Psychopathic personality.

c. Major abnormalities of mood.

d. Psychoneurotic disorder.

e. Pre-psychotic, post-psychotic and schizophrenic personalities.

f. Chronic alcoholism and drug addiction.

g. Syphilis of the central nervous system. See paragraph 85*a*.

h. Sexual perversions.

i. Stammering to such a degree that the registrant is unable to express himself clearly or to repeat commands.

93. Diagnostic criteria.—*a. Mental defect or deficiency.*—(1) Manifested by lack of general information concerning native environment; inability to learn, to reason, to calculate, to plan, to construct, to compare weights, etc.; defect in judgment, foresight, language, output of effort; suggestibility, untidiness, lack of personal cleanliness, anatomical stigmata of degeneration, muscular awkwardness. History of school life, vocational career, and disciplinary report will assist materially; then classify according to psychometric standards.

(2) Examiners will use extreme care and judgment in reporting their findings on enlistment records. Such terms as "imbecile" and "moron" will not be used,

but an approximate psychometric scaling will be listed as cause for rejection, as "mental age, eight years." Elaborate psychometric estimation is not necessary and any accepted abbreviated method will suffice. Intelligence cannot be definitely estimated and there is no test that is infallible. They are all only approximations and must be evaluated only in conjunction with accompanying factors and circumstances. Illiteracy *per se* is not to be classified as mental deficiency.

b. Psychopathic personalities.—In this ill-defined, more or less heterogeneous group are placed those individuals who, although not suffering from a congenital defect in the intellectual sphere, do manifest a definite defect in their ability to profit by experience. They are unable to proceed through life with any definite pattern of standardized activity. They are unable to respond in an adult social manner to the demands of honesty, truthfulness, decency, and consideration of their fellow associates. They are emotionally unstable, not to be depended upon; act impulsively with poor judgment; are always in difficulties, have many and various schemes without logical basis, lack tenacity of purpose, are easily influenced and oftentimes in conflict with the law. They do not take kindly to regimentation and are continually at variance with those who attempt to indoctrinate them in the essentials of military discipline. Such an individual has a decided influence upon his fellow associates and the morale of his organization, for he will not conform himself to organized authority and he derives much satisfaction in cultivating insubordination in others. Quite frequently he presents a favorable impression, is neat in appearance, talks well, and is well mannered. However, under this veneer the real defect is evident by past irresponsiveness to social demands and lack of continuity of purpose. Among this general group are to be placed many homosexuals, grotesque and pathological liars, vagabonds, wanderers, the inadequate and emotionally unstable, petty offenders, swindlers, kleptomaniacs, pyromaniacs, alcoholics, and likewise those highly irritable and arrogant individuals, so-called pseudoquerulents, "guardhouse lawyers," who are forever critical of organized authority and imbued with feelings of abuse and lack of consideration by their fellow men. All such men should be excluded from the service as far as possible, both because of the difficulties which these symptoms themselves cause and because of the fact that such individuals ultimately may develop full-fledged psychotic states.

c. Major abnormalities of mood (affective psychoses, manic depressive psychosis).—Major abnormalities of mood are shown by episodes of unreasonable elation or depression which have tended to recur without obvious connection with events. People who are known to be so mercurial in their reactions that their judgment is seriously impaired during the up or down swing of their moods will be rejected. Individuals known to have received medical or nursing care because of a morbid excitement or a depression will be rejected.

d. Psychoneurotic disorders.—(1) *Symptoms.*—These conditions, often having no objective signs, may easily escape notice. Such individuals may show—

(*a*) Conversion symptoms such as hysterical fits, absences, trances, hysterical deafness, blindness or loss of voice; hysterical paralyses or anesthesias, and vasomotor disturbances such as sweating, palpitation and dizziness, and other dysfunctions of internal organs. In evaluating all of these conditions, the history of interference with progress in civil life is of utmost importance.

(*b*) Excessive concern with minor or imaginary bodily ailments as manifested by multiple vague complaints, multiple operations for obscure disorders, unusual fatigability, vague pains, pressure feelings, distorted head sensations, etc.

(*c*) Obsessions, compulsions, phobic manifestations such as specific terrors of harmless objects or situations, food phobias, dirt and germ phobias, inflexible rituals of behavior about food, sleeping, dressing, compulsive acts, tics, obsessional thoughts, obsessional indecision, etc.

(*d*) Emotional disturbances such as chronic depression, mild elation, irritability and chronic or episodic insanity.

(2) *Physical disorders which may furnish important clues to psychoneurotic disabilities.*—Neurotic tensions may be manifested not only by frank psychoneuroses and behavior difficulties but also by manifestations of a variety of physical disturbances and organic disease processes. Such conditions as peptic ulcer, pylorospasm, mucous colitis, spastic constipation, neurocirculatory asthenia, paroxysmal tachycardia, vascular hypertension and hypotension, Raynaud's disease, fainting, convulsions, somnambulism, narcolepsy, migraine, glaucoma, eczema, psoriasis, enuresis, cardiospasm, impotency, and asthenia may have important emotional components and may therefore furnish important clues to the neurotic aspects of the individual. The presence of such conditions, if not in themselves disqualifying, should always lead to further study. Look for a close relationship.

e. Schizophrenic group.—(1) This category comprises the grave mental or personality handicaps. Prepsychotic and postpsychotic personalities and those actually suffering a schizophrenic ("dementia praecox") mental disorder manifest their condition by obscurely motivated peculiarities of behavior and thought. Of these, the so-called deteriorated states are the most obvious. Here belong the numerous shiftless, untidy, perhaps morose, sometimes nomadic individuals, who have had what was regarded as quite a normal childhood. Somewhere between the ages of 12 and 25 they underwent a change, acute or insiduous, with dilapidation of their social interests and the habits in which they had been trained. They may or may not have received treatment in hospitals for mental diseases.

(2) The paranoid personalities are another large division. These persons cling to fantastic beliefs in their overwhelming importance, and often feel that people are persecuting them or otherwise interfering with their career or well-being. Some of them believe that they are in communion with supernatural beings. Others believe that they are victims of plots, secret organizations, spy rings, or religious or fraternal groups. They are often plausible in supporting these delusions by clever misinterpretation of facts. Some of them are very evasive and skillful at concealing the pattern of their disorder. A morbid suspiciousness of anyone who takes an interest in them is frequent. They may become tense and hateful when interrogated. An attitude of unusual cautiousness or suspiciousness toward the examining physician or toward fellow individuals should suggest the possibility that the individual may be paranoid.

(3) The catatonic and prepsychotic states may present great difficulty in diagnosis. Perhaps the only sign of these conditions is the impression of queerness which the person makes on anyone who seeks to get acquainted with him. The actual oddities of behavior or thought may be subtle; it may be difficult,

in retrospect, to point to any particular instances of the unusual. The most striking signs of these conditions may in fact come out in connection with the physical examination. The physician, at some state of the physical examination, may observe a peculiar reaction which upon questioning may awaken a suspicion of a prepsychotic state. These individuals frequently entertain unfounded convictions as to bodily peculiarities or disorders which they attribute to excessive sexual acts of one sort or another. These beliefs, sometimes hard to elicit, are often medically incredible and bizarre. Questioning them on intimate personal matters often leads to great embarrassment, confused speech, or actual blocking of thought, so that they do not know what to say. Get history of family life and of school, vocational, and personal career.

f. Chronic alcoholism and drug addiction.—(1) *Chronic alcoholism.*—An individual will be regarded as a chronic alcoholic if he habitually uses alcohol to the point of social or physical disablement, as evidenced by loss of job, repeated arrests, or hospital treatment because of alcoholism. Such a history, if obtained, should be verified. Look for suffused eyes, prominent superficial blood vessels of nose and cheek, flabby, bloated face, red or pale purplish discoloration of mucous membrane of pharynx and palate; muscular tremor in the protruded tongue and extended fingers, tremulous handwriting, emotionalism, prevarication, suspicion, auditory or visual hallucinations, persecutory ideas.

(2) *Drug addiction.*—An individual will be regarded as a drug addict if he is or has recently been a habitual user of any of the opium preparations, cocaine, or cannabis indica (marijuana). A history of arrests for narcotic law violation is important; recent needle marks are suggestive; discolorations along the line of blood vessels on the arms, or scars from needle abscesses on the arms, shoulders, buttocks, or thighs are very important evidence but are not always present. The condition of the pupils is not important in active addicts.

g. Syphilis of the central nervous system.—See paragraph 85*a*.

h. Sexual perversions.—Persons habitually or occasionally engaged in homosexual or other perverse sexual practices are unsuitable for military service and will be excluded. Feminine bodily characteristics, effeminacy in dress or manner, or a patulous rectum are not consistently found in such persons, but where present should lead to careful psychiatric examination. If the individual admits or claims homosexuality or other sexual perversion, he will be referred to his local board for further psychiatric and social investigation. If an individual has a record as a pervert he will be rejected.

Section XXI

PURPOSELY CAUSED PHYSICAL DEFECTS

94. Report of apparently purposely caused defects.—Whenever it appears to an examining physician that an individual is suffering from self-inflicted or purposely caused physical defects which under the standards of physical examination prescribed herein would render him disqualified for military service of any kind, a full statement of the facts and of the condition of the individual and of the examining physician's recommendation will be prepared and submitted to the Director of Selective Service.

SECTION XXII

MALINGERING

95. Definition.—The malingerer is one whose complaints of bodily disorders and whose behavior or acts are in simulation of some physical or mental disease for the definite purpose of attaining a particular end which is more satisfactory to him or of seeking an escape from a fear-infested situation. Malingering is encountered in a number of situations but most frequently during the preliminary examinations and early training periods of military service. The simulation of neuroses and of physical disorders includes a wide variety of problems which must be differentiated from the ordinary neuroses as well as from physical illnesses; however, simulation is always in keeping with the extent of the knowledge possessed by the individual regarding the particular disorder from which he pretends to suffer and therefore constantly changes its methods and its maladies. A person gifted with histrionic talent and who has a considerable degree of knowledge and skill at his command may be able to simulate physical or mental conditions to such perfection that physicians may sometimes be deceived.

96. Differentiation.—*a.* For a disorder to be classed as *true* malingering, it must fulfill three conditions that—

(1) No obvious or frank disease or personality disorder is present.

(2) The individual is consciously aware of what he is doing and of the motive responsible for his attitude.

(3) He is fixed in carrying out a purpose to a preconceived result.

b. When confronted with a case of malingering the observer will try to ascertain how much of what constitutes the total picture is well acted drama and consciously done and how much is true in part and more or less unconscious. For practical purposes these reactions may be divided into the following:

(1) Malingering for the purpose of attaining a definite end by simulation of a disease by one who has no past history of similar patterns of reaction but who is making an attempt to escape in an emergency (temporary reaction); one who feigns his symptoms as a bluff and hopes to get away with it.

(2) Malingering to the extent of exaggerating or "capitalizing" conditions or symptoms that are present for the purpose of avoiding service. This includes an enlargement on minor physical ailments or on relatively insignificant diseases, emphasizing mild personality problems or neuroses, and overemphasis on symptoms of fatigue, etc.

(3) Malingering as a manifestation of a psychopathic personality with a suggestion or definite history of previous psychopathic behavior. In intelligence the psychopath may be retarded, of average endowment, or superior but he is incapable of adjustment under ordinary life conditions. The ranks of psychopathic personality contain many persons having an irresistible tendency to

alcoholism, drug addiction, sex perversion, and criminality, including numbers of cranks, extremists, eccentrics, hobos, and queer social misfits.

(4) The psychoneurotic suffering with hysteria, who believes in the reality of a disability which on the surface appears to be a definite simulation, requires a special investigation. The confusion of hysteria with true malingering is not infrequently made by those who consider nearly all hysterics as malingerers with symptoms that could be controlled voluntarily. Some of these psychoneurotics exaggerate more or less unconsciously their symptoms to gain their ends, thus emphasizing the questions of how much is neurosis, how much is simulation, and how much is associated with a change in personality.

(5) Malingering or reactions considered to be malingering may appear in those basically psychoneurotic, insecure, and apprehensive, or physically ill as well as in those suffering from psychoses, epilepsy, and organic brain disorders where there has been a definite change in personality. These reactions frequently confused with pure malingering may become much worse during investigation or attempted correction.

c. Among these five groups the typical members are readily distinguished but intermediate and doubtful cases which resist differentiation do occur. It should be kept in mind that it is even more difficult for a healthy person to feign disease than it is for a diseased person to simulate health and that a malingerer may be able to simulate and to accentuate single symptoms but he is practically always unable to feign the entire picture of the disease he has selected and thus the expert can usually detect omissions, discrepancies, and contradictions in the situation.

97. Feigned medical diseases.—*a.* The detection and management of malingerers simulating medical diseases depend upon the absence of positive findings in an individual who presents the general characteristics of the malingerer. There is especial need for the physical examination to be thorough in this group. Some of the cardiac cases at first regarded as malingerers may later be found to have mitral stenosis or bacterial endocarditis. Similarly, proper tests may show the existence of peptic ulcer in those suspected of feigning digestive abnormalities. The estimation of the reality of rheumatic pains is always a difficult matter.

b. Tachycardia and thyrotoxicosis may be temporarily induced by ingestion of drugs such as thyroid extract. Egg albumin or sugar may be added to urine. Canned milk may be utilized to simulate urethral discharge. Cantharides may be taken to cause albuminuria. Digitalis and strophanthus may be taken to cause abnormal heart findings. The skin may be irritated by various substances. Cathartics may be taken to bring about purging or to simulate a chronic diarrhea. An appearance of hemoptysis may be produced by adding blood, either human or that of animals, to the sputa. Sometimes merely coloring matter is added. Those who can vomit voluntarily what they swallow use the same means to create the appearance of hematemeses. Similarly, coloring matter may be added to the stools. Mechanical and chemical irritants may be used to cause inflammation about practically all the body orifices. Jaundice may be simulated by taking picric acid. Artificial jaundice is recognized by demonstration of picric acid in the urine. Crutches, spectacles, trusses, strappings, etc., may be used to create appearance of disability.

98. Feigned surgical conditions.—Under this are included old scars and injuries of the bones, fractures, and orthopedic conditions. Men may have teeth extracted in an effort to evade military service. Others may shoot or cut off their fingers or toes, usually on the right side, to disqualify themselves for

service. Some may put their hands under cars for this purpose. Retention of urine may be simulated. Substances may be injected under the skin to create abscesses. Crutches, braces, strappings, or trusses may be used to give the appearance of disability. Wounds are rarely self-inflicted when witnesses are present; consequently it is almost impossible to be certain of malingering in some cases.

99. Feigned nervous or mental illness.—*a. Psychosis.*—Rarely feigned by individuals and then usually a silly, foolish type. In case of doubt, hospital observation is necessary, with verification of past records. Mental deficiency is frequently feigned, especially by illiterates.

b. Pain and hypercesthesia.—The most frequent of all complaints. History inconsistent, ordinary indications of suffering absent. Absence of other symptoms usually accompanies types of pain of which complaint is made. Absence of objective evidence of localized pains. Note behavior when the registrant believes himself unobserved.

c. Anesthesia.—Complaint of anesthesia itself creates a suspicion of malingering as most patients with anesthesia are ignorant of it.

d. Epilepsy.—Men who have sustained head injury may claim fits. These complaints may be in reference to grand mal or petit mal. Petit mal attacks are spoken of as fainting attacks. In grand mal attacks there is loss of pupil response to light, knee jerks are lost, and the Babinski reflex may be present.

e. Hysteria.—Not feigned in itself but its existence creates confusion as to malingering. The question to be decided is whether the individual is too seriously affected with the neurosis to be useful as a soldier.

f. Stiff back.—Stiff back is a frequent symptom of hysteria in mobilization among selected men. In cases of this kind, organic diseases of the vertebrae can and will be excluded, if necessary by X-ray.

100. Simulated defects of vision.—See section IV.

101. Simulated defects of hearing.—See section V.

102. Bed wetting.—Enuresis either real or simulated may be a frequent complaint among individuals for military service, but it is *not* a cause for unconditional rejection. Men claiming to be bed wetters may be placed in class 1–A, unless enuresis is substantiated by a physician's affidavit or other acceptable documentary evidence.

103. General considerations.—*a.* All men suspected of malingering will be immediately subjected to a thorough psychiatric survey which will include a careful history of their previous behavior and adjustment record and a complete physical, neurological, and laboratory evaluation. Observation in hospital may be required. If simple genuine malingering exists, the man will be confronted with the situation and given time to reconsider his attitude. Those malingerers whose past record is not unfavorable and who are otherwise acceptable will not be rejected. Suspected malingerers found suffering from definite psychoneuroses and others in whom signs of mental disorders are detected will be rejected for military service.

b. Whenever it appears to an examining physician that an individual is endeavoring to escape service by malingering, if otherwise mentally and physically fit, he will be accepted.

INDEX

A

B

C

INDEX

INDEX

INDEX

H

I

K

INDEX

INDEX

INDEX

INDEX

INDEX

[A. G. 381 (9-18-42).]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

J. A. ULIO,
Major General,
The Adjutant General.

APPENDIX II

CHANGES IN PHYSICAL STANDARDS AS PRESCRIBED BY MOBILIZATION REGULATIONS 1–9, WAR DEPARTMENT, WASHINGTON, D. C., DATED 15 OCTOBER 1942, AS AMENDED BY CHANGE 1, DATED 22 JANUARY 1943, AND CHANGE 2, DATED 23 FEBRUARY 1943, RECOMMENDED BY THE COMMISSION APPOINTED UNDER SECTION 4 (e), PUBLIC LAW 197, 78th CONGRESS.

TABULATION OF CHANGES IN PHYSICAL STANDARDS

SECTION I

INFORMATION AND INSTRUCTIONS

(Old) Par 4. **Physical classification.**—*a. General service.*—Physically qualified for general military service. Registrants will be recommended for assignment for general service if they meet the requirements therefor throughout the entire physical examination.

(New) Par. 4. **Physical classification.**—*a. General service.*—Physically qualified for general military service. Registrants will be recommended for assignment for general service if they meet the requirements therefor throughout the entire physical examination. In those border-line cases, where a question is raised as to whether an individual should be classified for general or limited service, preference will be given to his initial classification for general service if the chief medical examiner has reason to believe the man can perform general military service duty.

(Old) Par. 4 *b. Limited service.*—Physically unfit for general military service, but fit for limited military service. Individuals who fail to qualify for general service, and who do not fall below limited service requirements in any phase of the examination will be recommended for assignment to limited service unless, because of multiple defects, the medical examiners recommend unqualified rejection as nonacceptable. Men recommended as nonacceptable will not be accepted unless specific directions to that effect have been issued by the War Department.

(New) Par. 4 *b. Limited service.*—Physically unfit for general military service, but qualified for limited military service. Individuals who fail to qualify for general service, and who do not fall below limited service requirements in any phase of the examination will be recommended for assignment to limited service unless, because of multiple defects, the medical examiners recommend unqualified rejection as nonacceptable.

(Old) Par. 4 *c. Nonacceptable.*—Physically unfit for any military service. All individuals who do not meet the physical requirements of general service, or limited service will be recommended as nonacceptable.

(New) Par. 4 *c. Nonacceptable.*—(1) Physically unfit for any military service. All individuals who do not meet the physical requirements of general service, or limited service will be recommended as nonacceptable.

(2) Care will be taken that all defects found will be recorded fully and accurately on the report of physical examination. The defects will be listed in the summary of the physical examination report in the order of their importance. The irremediable, disqualifying permanent defect will be listed as number one and the others in the order of their importance. The major disqualifying defect may be physical or mental.

(3) Any individual recommended as nonacceptable will not be accepted unless specific directions to that effect have been issued by the War Department.

SECTION II

GENERAL AND MISCELLANEOUS DEFECTS

(Old) Par. 6. General service.—*a.* Acute communicable diseases, provided acceptance of the individual is temporarily deferred until a final examination shows recovery without disqualifying sequelae. Individuals with uncomplicated venereal disease will not be accepted until instructions for their acceptance have been issued by the War Department. See Paragraph 72*a*.

(New) Par. 6. General service.—*a.* Individuals with acute pathological conditions, including acute communicable diseases except venereal diseases, from which in the natural course of the disease recovery occurs without sequelae, will be deferred until a final examination shows recovery has occurred without disqualifying sequelae.

(Old) Par. 6. General Service.—*b.* Malaria, acute, or malaria, chronic, unless severe.

(New) Par. 6. General service.—*b.* Malaria, acute, or malaria, chronic, if mild.

(Old) Par. 6. General service.—*c.* Uncinariasis, unless severe.

(New) Par. 6. General service.—*c.* Uncinariasis, if mild.

(Old) Par. 8. Nonacceptable.—*g.* Acute rheumatic fever or *authentic* history of recurrent attacks of rheumatic fever, chronic rheumatism and chronic arthritis.

(New) Par. 8. Nonacceptable.—*g.* Acute rheumatic fever or *verified* history of single or recurrent attacks of rheumatic fever within the previous 2 years.

(New, added) Par. 8. Nonacceptable.—*h.* Osteoarthritis or rheumatoid arthritis.

(Old) Par. 8. Nonacceptable.—*i.* Filariasis or trypanosomiasis.

(New) Par. 8. Nonacceptable.—*j.* Filariasis, trypanosomiasis, amoebiasis, or schistosomiasis.

(Old) Par. 8. Nonacceptable.—*k.* Uncinariasis, if severe.

(New) Par. 8. Nonacceptable.—*l.* Uncinariasis, if more than mild.

(Old) Par. 8. Nonacceptable.—*l.* Malaria, chronic, severe.

(New) Par. 8. Nonacceptable.—*m.* Malaria, chronic, if more than mild.

(Old) Par. 8. Nonacceptable.—*o.* Hernia, except small umbilical hernia.

(New) Deleted and rewritten. (See Section XV, par. 69 *g*, 70 *a*, 71 *a*.)

SECTION IV

EYES

(Old) Par. 16. General service.—*a.* For general military service in all arms and services.—Registrants whose visual acuity is not less than 20/200 in each eye without glasses, if correctible to at least 20/40 in each eye. The actual possession of suitable glasses by an individual is not required for his acceptance under these standards.

(New) Par. 16. General service.—*a.* Binocular (both eyes open) vision of not less than 20/40 without glasses, provided the vision in the more defective eye is not less than 20/70 without glasses and provided the defective vision is not due to active or progressive organic disease.

(New, added) Par. 16. General service.—*b.* Registrants whose visual acuity without glasses is not less than 20/200 in each eye, or 20/100 in one eye and 20/400 in the second eye, if vision is correctible to either (1) 20/40 in each eye, (2) 20/30 in the right eye and 20/70 in the left eye, or (3) 20/20 in the right eye and 20/400 in the left eye and provided the defective vision is not due to active or

progressive organic disease. The actual possession of suitable glasses by an individual is not required for his acceptance under these standards.

(Old) Par. 16. General service.—*d*. Slight conjunctivitis.

(New) Deleted.

(Old) Par. 16. General service.—*g*. Small pterygium not encroaching on cornea.

(New) Par. 16. General service.—*g*. Small pterygium not encroaching on cornea so as to interfere with vision.

(Old) Par. 16. General service.—*h*. Strabismus which does not interfere with vision.

(New) Deleted. (See par. 18 *p*.)

(Old) Par. 17. Limited service.—*a*. A minimum vision of 20/400 in one or both eyes without glasses if correctible with glasses to at least 20/40 in each eye.

(New) Par. 17. Limited service.—*a*. A minimum vision of 20/400 in each eye without glasses, correctible to 20/40 in one eye and 20/70 in the second eye, or 20/30 in one eye and 20/100 in the second eye.

(Old) Par. 17. Limited service.—*b*. Loss of one eye or blindness in one eye not due to progressive organic change with vision in the other eye of not less than 20/100 correctible to not less than 20/20.

(New) Par. 17. Limited service.—*b*. Loss of one eye (anophthalmos) or any degree of defective vision in one eye from below 20/400 to no light perception, if such defective vision is not due to active or progressive organic disease, with vision in the other eye of 20/100 without glasses, correctible to 20/20 with glasses.

(Old) Par. 18. Nonacceptable.—*c*. Disfiguring cicatrices of eyes.

(New) Par. 18. Nonacceptable.—Deleted.

(Old) Par. 18. Nonacceptable.—*d*. Lagophthalmos, if associated with signs of hyperthyroidism.

(New) Par. 18. Nonacceptable.—*c*. Lagophthalmos, if extreme.

(Old) Par. 18. Nonacceptable.—*g*. Chronic recurrent inflammatory disease of the globe.

(New) Par. 18. Nonacceptable.—*f*. Chronic recurrent inflammatory disease of the cornea or uveal tract.

(Old) Par. 18. Nonacceptable.—*q*. Permanent or well-marked strabismus.

(New) Par. 18. Nonacceptable.—*p*. Permanent and well-marked strabismus (over 30 degrees deviation).

(Old) Par. 18. Nonacceptable.—*t*. Chronic conjunctivitis.

(New) Par. 18. Nonacceptable.—*s*. Chronic conjunctivitis, other than mild, simple.

Section V

EARS

(Old) Par. 23. General service.—*a*. Hearing in each ear of 8/15 or better.

(New) Par. 23. General service.—*a*. Hearing in each ear of 8/15 or better or 15/15 in one ear and less than 8/15 in the other.

(Old) Par. 24. Limited service.—*a*. Hearing in one or both ears less than 8/15 but no less than 5/15 in either ear. Deafness in one ear if the hearing is not less than 15/15 in the other ear.

(New) Par. 24. Limited service.—There are no defects in hearing that warrant initial classification for limited service.

(Old) Par. 25. Nonacceptable.—Defects such as—

a. Hearing less than the minimum hearing prescribed under limited service.

(New) Par. 25. Nonacceptable.—Defects such as—

a. Hearing less than the minimum hearing prescribed under general service.

(Old) Par. 25. **Nonacceptable.**—*b.* Chronic purulent otitis media with or without mastoiditis.

(New) Par. 25. **Nonacceptable.**—*b.* Purulent otitis media with or without without mastoiditis.

(Old) Par. 25. **Nonacceptable.**—*f.* Atresia of the external auditory canal, or tumors of this part.

(New) Par. 25. **Nonacceptable.**—*f.* Severe atresia of the external auditory canal.

Section VI

MOUTH, NOSE, FAUCES, PHARYNX, TRACHEA, ESOPHAGUS, AND LARYNX

(Old) Par. 27. **General service.**—*d.* Deviation of the nasal septum or enlarged turbinates which do not seriously interfere with nasal breathing.

(New) Par. 27. **General service.**—*c.* Deviation of the nasal septum or enlarged turbinates which do not interfere more than mildly with nasal breathing.

(Old) Par. 28. **Limited service.**—*a.* Deviation of the nasal septum which moderately interferes with nasal breathing.

(New) Par. 28. **Limited service.**—*a.* Deviation of the nasal septum or enlarged turbinates which do not interfere more than moderately with nasal breathing.

(Old) Par. 29. **Nonacceptable.**—*f.* Chronic sinusitis of the accessory sinuses of the nose. (This diagnosis will be established by the presence of a chronic nasal discharge, large nasal polypi, and other signs and symptoms and confirmed by transillumination or x-ray examination or both.)

(New) Par. 29. **Nonacceptable.**—*f.* Chronic sinusitis of the accessory sinuses of the nose. (This diagnosis will be established by the presence of a chronic purulent nasal discharge, * * *.

(Old) Par. 29. **Nonacceptable.**—*h.* Malignant neoplasms of the larynx.

(New) Par. 29. **Nonacceptable.**—*h.* Malignant neoplasms.

Section VIII

SKIN

(Old) Par. 34. **General service.**—*b.* (4) Warts.

(New) Par. 35. **General service.**—*b.* (4) Warts, except plantar warts on weight-bearing areas.

(Old) Par. 36. **Nonacceptable.**—Psoriasis does not appear in old MR 1–9 as a nonacceptable skin disease but its nonacceptance is implied by par. 34 *b* (11), if more than mild and if extensive.

(New) Par. 37. **Nonacceptable.**—*l.* Psoriasis, if more than mild.

(Old) Par. 36. **Nonacceptable.**—Warts not listed in old MR 1–9 as a nonacceptable defect.

(New) Par. 37. **Nonacceptable.**—*p.* Plantar warts on weight-bearing areas.

Section X

SPINE, SCAPULAE, AND SACROILIAC JOINTS

(Old) Par. 40. **General service.**—*a.* Lateral curvature of the spine of 2 inches or less from the midline if the mobility and weight-bearing power are good.

(New) Par. 41. General service.—*a*. Lateral deviation of the spine of 1 inch or less from the midline if the mobility and weight-bearing power are good.

(Old) Par. 40. General service.—Does not appear in old MR 1–9 in this section. (See par. 85 *i*.)

(New) Par. 41. General service.—*f*. Spina bifida occulta providing it is asymptomatic, unassociated with objective signs and symptoms and can be demonstrated by x-ray examination only.

(Old) Par. 41. Limited service.—*a*. Lateral deviation of the spine from the midline of more than 2 inches and less than 3 inches.

(New) Par. 42. Limited service.—Lateral deviation of the spine from the midline of more than 1 inch and less than 2 inches.

(Old) Par. 42. Nonacceptable.—*b*. Osteoarthritis.

(New) Par. 43. Nonacceptable.—*b*. Osteoarthritis or rheumatoid arthritis; or chronic arthritis from any cause.

(Old) Par. 42. Nonacceptable.—*c*. Healed fractures of the vertebrae or pelvic bones with associated disqualifying symptoms.

(New) Par. 43. Nonacceptable.—*c*. Healed fractures of the vertebrae or pelvic bones with associated symptoms which have prevented the individual from following a useful vocation in civil life.

(Old) Par. 42. Nonacceptable.—*d*. Lateral deviation of the spine from the midline of more than 3 inches. Curvature of the spine (kyphosis or lordosis) of a degree sufficient to interfere with the wearing of a uniform or military equipment or which has prevented the individual from following a useful vocation in civil life.

(New) Par. 43. Nonacceptable.—*d*. Lateral deviation of the spine from the midline of more than 2 inches. Curvature of the spine (scoliosis, kyphosis, or lordosis) of a degree sufficient to interfere with the wearing of a uniform or military equipment or which has prevented the individual from following a useful vocation in civil life.

(Old) Par. 42. Nonacceptable.—Nucleus pulposus not in old MR 1–9.

(New) Par. 43. Nonacceptable.—*f*. Nucleus pulposus (herniation intervertebral disc) or history of operation for this condition.

Section XI

EXTREMITIES

(New, added) Par. 45. General service.—*d*. Entire loss of little finger of either or both hands, or the ring finger of the left hand.

(New, added) Par. 45. General service.—*e*. Loss of terminal phalanx of the right index finger; loss of the terminal and middle phalanges of one finger, except the right index finger, on one or both hands; loss of one phalanx of one or all fingers on one or both hands, provided the function of the hand is ample to permit the performance of general military duty.

(Old) Par. 44. General service.—*f*. Loss of two entire fingers of either hand, except a combination of right index and middle finger.

(New) Par. 6. Limited service.—*a*. Loss of two entire fingers of either hand, except a combination of the right index and middle finger.

(Old) Par. 44. General service.—*j*. Flat foot unless accompanied with symptoms of weak foot or when the foot is weak on test. Pronounced cases of flat foot attended with decided eversion of the foot and marked bulging of the inner border, due to inward rotation of the astragalus, are disqualifying regardless of the presence or absence of subjective symptoms.

(New) Par. 45. General service.—*h*. Flat foot unless * * *, due to inward rotation of the astragalus, and rigid flat foot are disqualifying regardless * * *.

(Old) Par. 44. General service.—*l*. Clubfoot of slight degree if tarsal, metatarsal, and phalangeal joints are flexible, permitting the wearing of a military shoe and, in the opinion of the examiner, will not interfere with the performance of military duty.

(New) Par. 46. Limited service.—*g*. Clubfoot of slight degree * * *.

(Old) Par. 44. General service.—*m*. Slight claw toes not involving obliteration of the transverse arch and which do not interfere with the wearing of a military shoe.

(New) Par. 46. Limited service.—*h*. Slight claw toes not involving * * *.

(Old) Par. 44. General service.—*n*. Hammertoe which is flexible and which does not interfere with the wearing of a military shoe. (Hammertoe usually involves the second digit and unless it is rigid is not a disqualifying defect.)

(New) Par. 45. General service.—*i*. Hammertoe which does not interfere with the wearing of a military shoe.

(Old) Par. 45. Limited service.—*b*. Loss of two entire fingers of either hand, not to include the right index finger, provided the thumb remains.

(New) Par. 46. Limited service.—*a*. Loss of two entire fingers of either hand, except a combination of the right index and middle finger.

(Old) Par. 45. Limited service.—*j*. Hammertoe with rigidity.

(New) Par. 46. Limited service.—Hammertoe does not appear in limited service section in new MR 1–9. (See par 45 *i*.)

(Old) Par. 45. Limited service.—Internal derangement of the knee joint * * * not in old MR 1–9.

(New) Par. 46. Limited service.—*m*. Internal derangement of knee joint.

(1) History of, providing disability has been mild and infrequent.

(2) Operation for, providing a period of 6 months has elapsed since operation with freedom from symptoms.

Under (1) and (2) above, the knee ligaments should be stable in lateral and anteroposterior directions in comparison with the normal knee; the x-ray should be negative; the thigh musculature not weak or atrophic enough to interfere with function and the full active motion in flexion and extension is present.

(Old) Par. 46. Nonacceptable.—*b*. Loss of the right index finger or more than two entire fingers of one hand.

(New) Par. 47. Nonacceptable.—*b*. Loss of more than two entire fingers of either hand.

(Old) Par. 46. Nonacceptable.—*j*. Flat foot when accompanied with symptoms of weak foot or when the foot is weak on test. Pronounced cases of flat foot attended with decided eversion of the foot and marked bulging of the inner border, due to inward rotation of the astragalus, are disqualifying regardless of the presence or absence of subjective symptoms.

(New) Par. 47. Nonacceptable.—*j*. Rigid flat foot or flat foot * * *.

(Old) Par 46. Nonacceptable.—*l*. Hallux valgus, if severe and associated with marked exostosis or bunion, especially when there are signs of irritation over the joint.

(New) Par. 47. Nonacceptable.—*l*. Hallux valgus, if severe and associated with marked exostosis or bunion.

(Old) Par. 46. Nonacceptable.—Not in par. 46 of old MR 1–9. (See par. 8 *g*.)

(New) Par. 47. Nonacceptable.—*s*. Osteoarthritis or rheumatoid arthritis; or chronic arthritis from any cause.

(Old) Par. 46. Nonacceptable.—Not in old MR 1–9.

(New) Par. 47. Nonacceptable.—*t*. Plantar warts on weight-bearing areas.

Section XII

NECK

(Old) Par. 48. General service.—Not in old MR 1–9.

(New) Par. 49. General service.—*d*. Healed tuberculous lymph nodes when few in number and densely calcified.

(Old) Par. 48. General service.—Not in old MR 1–9.

(New) Par. 49. General service.—*e*. History of thyroidectomy for nontoxic goiter.

(Old) Par. 49. Limited service.—There are no neck criteria to warrant initial selection as limited service.

(New) Par. 50. Limited service.—History of thyroidectomy for toxic goiter with complete absence of active manifestations for two years.

(Old) Par. 50. Nonacceptable.—*a*. Exophthalmic goiter. (See Section XVII.)

(New) Par. 51. Nonacceptable.—*a*. Toxic goiter.

(Old) Par. 50. Nonacceptable.—*b*. Thyroid enlargement from any cause associated with toxic symptoms. (See Section XVII.)

(New) Par. 51. Nonacceptable.—*b*. Not in new MR 1–9, because of redundancy.

(Old) Par. 50. Nonacceptable.—*c*. Carcinoma of the thyroid or other structures of the neck.

(New) Par. 51. Nonacceptable.—*b*. Tumor of thyroid or other structures of the neck, including enlarged lymph nodes and benign tumors of the neck, if the enlargement is of such degree as to interfere with wearing of a uniform or military equipment.

(Old) Par. 50. Nonacceptable.—*f*. Tuberculous lymph nodes.

(New) Par. 51. Nonacceptable.—*e*. Tuberculous lymph nodes, except as specified in 49 *d*.

(Old) Par. 50. Nonacceptable.—*i*. Simple goiter unassociated with toxic pressure symptoms, enlarged lymph nodes and benign tumors of the neck if the enlargement is of such degree as to interfere with wearing of a uniform or military equipment.

(New) Par. 51. Nonacceptable.—*h*. Simple goiter if associated with pressure symptoms, confirmed by X-ray, or if enlargement is of such a degree to interfere with wearing of a uniform or military equipment.

(Old) Par. 50. Nonacceptable.—*j*. Simple adenomatous goiter.

(New) Par. 51. Nonacceptable.—Included in par. 51 *b* and 51 *h*.

(Old) Par. 50. Nonacceptable.—*k*. Thyrolingual cyst.

(New) Par. 51. Nonacceptable.—Not in new MR 1–9.

Section XIII

LUNGS AND CHEST WALL

(Old) Par. 56. General service.—*f*. Healed intrathoracic primary tuberculous lesions, demonstrable in roentgenograms, but of slight extent. The following specifications of the limits of such lesions are intended to exclude persons with disease which is most likely to be in part caseous and, therefore, potentially hazardous. The limits are set arbitrarily to provide an objective basis on which the examiner may render a decision. All measurements refer to single, standard 14- by 17-inch direct projection roentgenograms. These lesions may consist of—

(1) Calcified residues of lesions of the intrathoracic lymph nodes, provided

none of these exceeds an arbitrary limit of 1.5 centimeter in diameter and the total number of such lesions does not exceed five.

(2) Calcified lesions of the pulmonary parenchyma, provided the total number of these does not exceed ten. One of these may equal but not to exceed 1 centimeter in diameter, but none of the remainder may exceed 0.5 centimeter in diameter. In the roentgenogram such calcified lesions should appear isolated, sharply circumscribed, homogeneous, and dense.

The above arbitrary limits of calcified lesions are set on the assumption that large and numerous lesions are more likely to be partially unhealed, and therefore a potential source of future recrudescence than small lesions of limited distribution. It is recognized, however, that in some individuals calcified tuberculous lesions exceeding these limits may be present which are so well healed that the possibility of future reactivation is remote. Further consideration may be given to the acceptability of persons with calcified lesions of this type when the state of health in all other respects clearly warrants the opinion that the lesions in question are healed. In such cases the history of the applicant and his age, as well as the character of the lesions as seen in X-ray films, provide criteria for estimating the probability of complete arrest of the tuberculous process. If there is no history of active tuberculosis or symptoms which might be interpreted as evidence of this disease and if the applicant is more than 25 years of age, and if finally the calcified lesions seen are dense and discrete in character and not hazy or irregular in outline, such lesions may be considered as not prejudicial to future health. In these cases the applicant may be accepted provided the report of physical examination and the chest X-ray films have been reviewed and acceptance has been recommended by a medical examiner specially qualified in the diagnosis of diseases of the chest.

(New) Par. 57. **General service.**—*a*. Calcified residuals of primary tuberculosis in the pulmonary parenchyma or hilum lymph nodes, provided the size, number, and character of such lesions are not such as to suggest the possibility of reactivation. Well-calcified masses in adult white subjects usually represent entirely healed lesions. Partially calcified and therefore presumably partially caseous masses in younger subjects, particularly in persons of other than the white race, are potentially hazardous. Clinical judgment is important in rendering a decision. In those cases in which a decision cannot be made on roentgenological grounds alone, it is essential that a careful examination be made by an examiner with special experience in tuberculosis, taking into account the age of the subject, history, and the possible presence of nonpulmonary tuberculosis.

(Old) Par. 58. **Nonacceptable.**—*a*. Tuberculosis of the lungs or tracheobronchial lymph nodes except as defined in paragraphs 56 *f* and 58 *b*.

(New) Par. 59. **Nonacceptable.**—*a*. Tuberculosis of the lungs or tracheobronchial lymph nodes except as defined in paragraphs 57 *a* and 57 *g* (5). Small infiltrative tuberculous lesions, *unless of sharply defined linear or nodular appearance on roentgenograms*, as described in paragraph 57 *g* (5), are disqualifying even though involving a total area of less than five square cm. and apparently stable over a period of six months.

(Old) Par. 58. **Nonacceptable.**—*b*. Scarred infiltrative tuberculous lesions of the lungs, except that small fibroid or calcified lesions represented in roentgenograms as sharply demarcated strandlike or well-defined small nodular shadows not exceeding a total area of 5 square centimeters may be accepted after deferment until subsequent examination demonstrates that the lesion is stationary and not likely to be reactivated. The minimum period of time to determine this is 6 months. It must be recognized that either progression or regression of the lesion indicates instability. Clinical judgment, taking into consideration other factors, including age and race, must be exercised in estimating the likelihood of

reactivation. Experience indicates a greater likelihood of reactivation of a lesion that appears to be stable in persons under 25 years of age than in older persons.

(New) Par. 57. General service.—*g.* (5). Scarred fibroid or fibrocalcific infiltrative tuberculous lesions of the lungs represented in roentgenograms as *sharply demarcated, strandlike or well-defined, small nodular shadows not exceeding a total area of five square cm.* may be accepted after deferment until subsequent examination clearly demonstrates that the lesion is stationary and not likely to be reactivated. The minimum period of time to determine this is six months. It must be recognized that either progression or regression of the lesion indicates instability. Clinical judgment, taking into consideration other factors, including age and race, must be exercised in estimating the likelihood of reactivation. Experience indicates a greater likelihood of reactivation of an apparently stable lesion in persons under twenty-five years of age than in older persons.

(Old) Par. 58. Nonacceptable.—*c.* Fibrinous or serofibrinous tuberculous pleurisy, and serofibrinous pleurisy of unknown origin. Inasmuch as pleurisy, with or without effusion, is a very frequent manifestation of active tuberculosis, all persons who have apparently recovered from pleurisy will be examined with the greatest care. Chronic fibrous pleurisy sufficient to cause marked retraction of the chest wall and of the mediastinal organs or to cause a density in the roentgenogram which completely obscures a considerable section of the pulmonary markings will be considered disqualifying.

(New) Par. 59. Nonacceptable.—*b.* Fibrinous or serofibrinous * * * care. Authenticated history of pleural effusion of unknown origin within the last five years; chronic fibrous pleurisy sufficient to cause marked retraction of the chest wall and of the mediastinum or to cause a density in the roentgenogram which completely obscures a considerable section of the pulmonary fields.

(Old) Par. 58. Nonaacceptable.—*d.* Empyema or unhealed sinuses of the chest wall following operation of empyema.

(New) Par. 59. Nonacceptable.—*d.* Empyema; residual sacculation or unhealed sinuses of the chest wall following operations for empyema.

(Old) Par. 58. Nonacceptable.—*g.* Pulmonary emphysema with impairment of function.

(New) Par. 59. Nonacceptable.—*h.* Bullous or generalized pulmonary emphysema.

(Old) Par. 58. Nonacceptable.—*o.* Tumor of the lung, pleura, or mediastinum.

(New) Par. 59. Nonacceptable.—*n.* Tumor of the trachea, bronchi, lung, pleura, or mediastinum.

(Old) Par. 58. Nonacceptable.—*p.* Spontaneous pneumothorax.

(New) Par. 59. Nonacceptable.—*c.* Spontaneous pneumothorax, history of spontaneous pneumothorax within the last three years, or history of repeated spontaneous pneumothorax authenticated by properly dated X-ray films.

Section XIV

HEART, BLOOD VESSELS, AND CIRCULATION

(New, added) Par. 63. General service.—*b.* Given a heart of normal size, responding normally to exercise, a slight to moderate pulmonary systolic murmur, louder in the recumbent position and on expiration and largely or entirely abolished by deep inspiration, is the commonest of all murmurs and is to be considered physiological (functional).

A faint systolic murmur localized at the aortic area without thrill and followed by a normal second sound may be considered normal, but any aortic systolic mur-

mur of moderate intensity or louder probably indicates disease (for example, aortic dilatation or stenosis), and demands further study. A loud systolic murmur (usually with thrill), maximal at the left of the sternum in the third and fourth spaces, suggests the probability of a congenital ventricular septal defect and is a cause for rejection. A faint systolic murmur at the apex, varying in intensity, with forced respiration, less well heard in the erect position than when recumbent and unattended by cardiac enlargement or other evidence of heart disease, or by a verified history of rheumatic fever, may be considered to be physiological (functional), but a moderate or loud apical systolic murmur which persists in all phases of respiration and body positions and is intensified by exercise is evidence of abnormality of the heart. Any diastolic murmur heard over any portion of the cardiac area is evidence of disease. The presystolic (or middiastolic) murmur of mitral stenosis may be confined to a small area at or just within the cardiac apex and heard only in the recumbent position (best in the left lateral decubitus and with the bell stethoscopic chest piece) ; it is accentuated by exercise. A slight aortic diastolic murmur, on the other hand, may be heard only along the left sternal border, with the patient erect or leaning slightly forward, best at the end of forced expiration ; it is more easily heard with the Bowles stethoscopic chest piece. Frequently, interpretation must be based on cumulative evidence or a number of relatively slight deviations from the normal.

(Old) Par. 62. General service.—*f.* Neurocirculatory asthenia, if very mild in degree.

(New) Par. 63. General service.—Not in new MR 1–9, this paragraph. (See par. 65 *q.*)

(Old) Par. 64. Nonacceptable.—*c.* A persistent heart rate of 100 or over when this is proved to be persistent in the recumbent posture and on observation and reexamination over a sufficient period of time. (See also section XXI.)

(New) Par. 65. Nonacceptable.—*c.* * * * over a sufficient period of time, unless in the opinion of the medical examiner the increased cardiac rate is due to psychic reaction and not secondary to any disease condition including infection.

(Old) Par. 64. Nonacceptable.—*d.* Paroxysmal tachycardia. (See also section XXI.)

(New) Par. 65. Nonacceptable.—*d.* Paroxysmal tachycardia if recurrent and disabling. (See also section XXIII.)

(Old) Par. 64. Nonacceptable.—*i.* Persistent blood pressure at rest above 150 mm. systolic or above 90 diastolic unless in the opinion of the medical examiner the increased blood pressure is due to psychic reaction and not secondary to renal or other systemic disease.

(New) Par. 65. Nonacceptable.—*i.* Persistent blood pressure at rest above 150 mm. systolic or above 90 mm. diastolic. If the blood pressure reading is somewhat (10–20 mm.) above 150 mm. systolic on the first reading, it should be repeated after one-half hour's rest recumbent.

(Old) Par. 64. Nonacceptable.—*n.* Acute endocarditis.

(New) Par. 65. Nonacceptable.—*n.* Endocarditis.

(Old) Par. 64. Nonacceptable.—*p.* Coronary thrombosis.

(New) Par. 65. Nonacceptable.—*p.* Authenticated history of coronary thrombosis and/or myocardial infarction.

(Old) Par. 64. Nonacceptable.—*q.* Neurocirculatory asthenia (effort syndrome), unless very mild. Usual symptoms of this condition are exhaustion, breathlessness, heartache, and palpitation. These symptoms may follow exertion such as would not produce them in healthy individuals. These, and other symptoms such as dizziness or fainting, may arise without evidence of organic disease sufficient to account for the disability of the individual. Cases of effort syndrome

may be divided into four groups. (In some cases more than one of these factors is present.)

(1) As an accompaniment of organic heart disease.

(2) Following infections.

(3) In individuals with poor physique or insufficient training for the work required.

(4) Orthostatic hypotension or tachycardia.—The blood pressure and pulse rate will be taken with the individual in the recumbent position and after standing 3 minutes. An increase in a normal recumbent pulse rate to 120 beats per minute or more when the individual stands or a decrease of a normal blood pressure (when the individual is recumbent) to values less than 90 systolic and 60 diastolic when the individual stands may be considered evidence of a definite physiologic disturbance and in itself cause for rejection unless the condition is very temporary following an illness, operation, or exhausted state.

(New) Par. 65. Nonacceptable.—*q.* Neurocirculatory asthenia (effort syndrome) * * * Cases of effort syndrome may occur—

(1) As an accompaniment of organic heart disease.

(2) Following infections.

(3) In individuals with poor physique or insufficient training for the work required.

(In some cases more than one of these factors is present.)

It is important to observe that neurocirculatory asthenia should not be confused with tachycardia alone or increased blood pressure alone or both together although such conditions may be present with neurocirculatory asthenia. The diagnosis must be clear and based on the symptom complex.

(New) Par. 65. Nonacceptable.—*r.* Orthostatic hypotension or tachycardia. The blood pressure and pulse rate will be taken with the individual in the recumbent position and after standing 3 minutes. An increase in pulse from normal in recumbent position to 120 beats per minute or more when the individual stands or a decrease of a normal blood pressure (when the individual is recumbent) to values less than 90 systolic and 60 diastolic when the individual stands may be considered evidence of a definite physiologic disturbance and in itself cause for rejection unless the condition is very temporary following an illness, operation, or exhausted state.

(Old) Par. 64. Nonacceptable.—Not in MR 1–9, this section. (See par. 8 *g.*)

(New) Par. 65. Nonacceptable.—*s.* Acute rheumatic fever, or *verified* history of single or recurrent attacks of rheumatic fever within the previous 2 years.

Section XV

ABDOMINAL ORGANS AND WALL

(Old) Par. 68. General service.—*i.* Intestinal parasites or their eggs in the stools.

(New) Par. 69. General service.—Not in new MR 1–9, this section. (See par. 8 *j.*)

(Old) Par. 69. Limited service.—There are no defects of the abdominal organs or wall to warrant initial selection for limited service.

(New) Par. 70. Limited service.—*a.* Hernia, inguinal, which has not descended into the scrotum; femoral.

b. There are no other defects of the abdominal organs or wall to warrant initial selection for limited service.

(Old) Par. 70. Nonacceptable.—*a.* Hernia, inguinal, femoral or post-operative. Umbilical hernia, if moderate or large in size.

(New) Par. 71. Nonacceptable.—*a*. Hernia, inguinal, which has descended into the scrotum; recurrent; post-operative; ventral; umbilical, if moderate or large in size.

(Old) Par. 70. Nonacceptable.—*b*. Chronic cholecystitis with or without cholelithiasis, if diagnosis is confirmed by usual laboratory procedures or authentic medical history.

(New) Par. 71. Nonacceptable.—*b*. Acute or chronic cholecystitis * * *.

(Old) Par. 70. Nonacceptable.—*c*. Ulcer of the stomach or duodenum, if diagnosis is confirmed by the usual laboratory procedures, or authentic medical history; also authentic history of gastric or duodenal ulcer.

(New) Par. 71. Nonacceptable.—*c*. Ulcer of the stomach or duodenum, if diagnosis is confirmed by the usual laboratory procedures or authentic history of gastric or duodenal ulcer.

(Old) Par. 70. Nonacceptable.—*d*. Surgical operations for gastric or duodenal ulcer.

(New) Par. 71. Nonacceptable.—*d*. Authenticated history of surgical operations for gastric or duodenal ulcer.

(Old) Par. 70. Nonacceptable.—*e*. Intestinal obstruction of any kind.

(New) Par. 71. Nonacceptable.—*e*. Authenticated history of true intestinal obstruction of any kind.

(Old) Par. 70. Nonacceptable.—*g*. Stricture of the rectum.

(New) Par. 71. Nonacceptable.—*g*. Stricture or prolapse of the rectum.

(Old) Par. 70. Nonacceptable.—*i*. Schistosomiasis.

(New) Par. 71. Nonacceptable.—In par. 8 *j* of new MR 1–9.

(Old) Par. 70. Nonacceptable.—*j*. Enlargement of the spleen associated with leukemia, Hodgkin's disease, or splenic anemia.

(Old) Par. 70. Nonacceptable.—*k*. Great enlargement of the spleen from any cause.

(New) Par. 71. Nonacceptable.—*i*. Enlargement of the spleen associated with leukemia, Hodgkin's disease, splenic anemia, or other disqualifying disease; great enlargement of the spleen from any cause.

(Old) Par. 70. Nonacceptable.—*l*. Large internal and external hemorrhoids with or without prolapse of the rectum.

(New) Par. 71. Nonacceptable.—*j*. External hemorrhoids sufficient in size to produce marked symptoms. Internal hemorrhoids if large or accompanied with hemorrhage, or protruding intermittently or constantly.

(Old) Par. 70. Nonacceptable.—*m*. Megacolon, diverticulitis, and ileitis.

(New) Par. 71. Nonacceptable.—*k*. Megacolon, diverticulitis, ileitis, and ulcerative colitis.

(Old) Par. 70. Nonacceptable.—Not in old MR 1–9, this section. (See par. 74 *v*.)

(New) Par. 71. Nonacceptable.—*l*. Absence of one kidney.

(Old) Par. 70. Nonacceptable.—Not in old MR 1–9, this section. (See par. 8 *m*.)

(New) Par. 71. Nonacceptable.—*m*. Splenectomy for any cause, other than trauma or congenital hemolytic icterus.

(Old) Par. 70. Nonacceptable.—Not in old MR 1–9.

(New) Par. 71. Nonacceptable.—*n*. Cirrhosis of the liver.

NOTE.—SECTION XVI, Genito-urinary and Venereal Diseases of the old MR 1–9 has been revised and separated into two sections in the proposed MR 1–9 and appears in SECTION XVI, Veneral Diseases and SECTION XVII, Genito-urinary Diseases. The comparison of the essential changes in these sections follows by paragraph numbers and subparagraph letters:

(Old) Par. 72. General service.—*a*. Gonorrhea, uncomplicated, acute or chronic; syphilis, except cardiovascular, cerebrospinal, or visceral syphilis; uncomplicated chancroid. (Acceptance of individuals with these conditions by Army examining boards at the initial examination will be deferred until facilities have been provided for their care and instructions for their acceptance have been issued by the War Department.)

(New) Par. 73. General service.—*a*. Gonorrhea, uncomplicated, acute or chronic.

(New) Par. 73. General service.—*b*. Syphilis, except cardiovascular, cerebrospinal or visceral.

(New) Par. 73. General service.—*c*. Chancroid, uncomplicated.

(New, added) Par. 77. General service.—*h*. Phimosis.

(New, added) Par. 74. Limited service.—There are no venereal disease criteria to warrant initial selection for limited service.

(New, added) Par. 75. Nonacceptable.—*c*. Other complications of gonorrhea, including acute prostatitis, seminal vesiculitis, and epididymitis.

(Old) Par. 74. Nonacceptable.—*w*. Amputation of the penis.

(New) Par. 79. Nonacceptable.—*k*. Amputation of the penis, if the resulting stump is insufficient to permit normal function of micturition.

(Old) Par. 74. Nonacceptable.—*e*. Surgical kidney with or without renal calculus.

(New) Par. 79. Nonacceptable.—*d*. Acute or chronic infections of the kidney.

(Old) Par. 74. Nonacceptable.—*m*. Hypertrophy of the prostate gland.

(New) Par. 79. Nonacceptable.—*m*. Hypertrophy of the prostate gland with urinary retention.

Section XVIII

ENDOCRINE AND METABOLIC DISORDERS

(Old) Par. 77. Limited service.—*b*. Pellagra, beriberi, scurvy, and other nutritional deficiencies, if mild and remediable by diet and appropriate treatment.

(New) Par. 82. Limited service.—*b*. Pellagra, beriberi, scurvy, sprue, and other nutritional deficiencies, if mild and remediable by diet and appropriate treatment.

(Old) Par. 78. Nonacceptable.—*c*. Cretinism with imbecility or dwarfism.

(New) Par. 83. Nonacceptable.—*c*. Cretinism.

(Old) Par. 78. Nonacceptable.—*d*. Myxedema (with clinical manifestations and diagnosis not based solely on low basal metabolic rate).

(New) Par. 83. Nonacceptable.—*d*. Myxedema, spontaneous or post-operative (with clinical * * *).

(Old) Par. 78. Nonacceptable.—*e*. Gigantism or acromegaly, if markedly disfiguring or if associated with other symptoms of severe pituitary dysfunction.

(New) Par. 83. Nonacceptable.—*e*. Gigantism or acromegaly.

(Old) Par. 78. Nonacceptable.—*k*. Renal glycosuria.

(New) Par. 83. Nonacceptable.—*k*. Persisting glycosuria.

(Old) Par. 78. Nonacceptable.—*n*. Simmonds' disease.

(Old) Par. 78. Nonacceptable.—*o*. Cushing's syndrome.

(New) Par. 83. Nonacceptable.—*n*. Simmonds' disease; Cushing's syndrome; other diseases due to a disorder of the pituitary gland.

SECTION XIX

DISEASES OF BLOOD AND BLOOD-FORMING TISSUES

(Old) Par. 79. General service.—Not in old MR 1–9 in this section. (See Par. 6 *b*.)

(New) Par. 84. General service.—*b*. Malaria, acute or chronic, mild.

(Old) Par. 81. Nonacceptable.—*c*. Primary pernicious anemia.

(New) Par. 86. Nonacceptable.—*c*. Pernicious anemia.

(Old) Par. 81. Nonacceptable.—*i*. Malaria, chronic, if severe.

(New) Par. 86. Nonacceptable.—*i*. Malaria, chronic, if more than mild.

(Old) Par. 81. Nonacceptable.—Not in old MR 1–9 in this section. (See par. 8 *j*.)

(New) Par. 86. Nonacceptable.—*k*. Hodgkin's disease.

SECTION XX

NEUROLOGICAL DISORDERS

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SECTION XXI

PSYCHOSES, PSYCHONEUROSES, PERSONALITY DISORDERS

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SECTION XXII

INTELLIGENCE

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SECTION XXIII

PURPOSELY CAUSED PHYSICAL DEFECTS

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SECTION XXIV

MALINGERING

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NOTE.—Just prior to the meeting of the Commission, the Neuropsychiatry Division, Surgeon General's Office, U. S. Army, had completed a proposed revision of the sections of Mobilization Regulations 1–9, dated 15 October 1942, relating to neuropsychiatric standards (Section XIX, NEUROLOGICAL DISORDERS: Section XX, PSYCHOSES, PSYCHONEUROSES, PERSONALITY DISORDERS; Section XXI, PURPOSELY CAUSED PHYSICAL DEFECTS; Section XXII, MALINGERING). This revision made no significant changes in the standards themselves but provided more suitable instructions for conducting the examination and interpreting the examiner's findings, and coincidentally provided a better arrangement and designation of sections. After slight modification of this revision, it was approved and incorporated in the accompanying draft of revision of Mobilization Regulations 1–9. To avoid adding length and bulk to this report, the above designated sections of the old Mobilization Regulations 1–9, and those of the proposed revision are not transcribed herein.

APPENDIX III

STATEMENT OF REQUIREMENTS FOR ADMISSION TO THE ARMED FORCES FOR BOTH GENERAL AND LIMITED SERVICE (INCLUDING CHANGES THE COMMISSION HAS DETERMINED SHOULD BE MADE IN THE CURRENT REGULATIONS)

MOBILIZATION REGULATIONS
No. 1-9

WAR DEPARTMENT,
WASHINGTON 25, D. C.

STANDARDS OF PHYSICAL EXAMINATION DURING MOBILIZATION

SECTION I

INFORMATION AND INSTRUCTIONS

*This pamphlet supersedes MR 1-9, 15 October 1942.

1. **Purpose.**—*a.* The purpose of these regulations is to—

(1) Set forth the standards of physical requirements for men procured for general military service.
(2) Prescribe permissible deviations from the general service standards for limited military service.
(3) Describe deviations from the above standards which are not acceptable for any class of military service.

b. So far as it applies to enlisted men AR 40–105 is superseded by these regulations. These regulations will apply to men in the following categories:

(1) Men enlisted or reenlisted in the Regular Army.
(2) Men for enlistment or reenlistment in the Regular Army Reserve, Enlisted Reserve Corps, and Reservists on call to active service if they have been in the inactive Reserve longer than 90 days.
(3) Men enlisted or reenlisted in the National Guard while in Federal Service.
(4) Enlisted men of the National Guard on induction into Federal Service.
(5) Men enlisted in the Army of the United States.
(6) Men inducted into the Army under the provisions of the Selective Training and Service Act of 1940, as amended.

2. **Publication.**—*a.* These regulations are published for the information and guidance of all medical examiners who may be used by the Army.

b. Medical examiners should read every section of these regulations in order that they may have a broad knowledge concerning physical standards.

3. **Objectives.**—The objective is to procure men who are physically fit for the rigors of general military service or for limited military service. Therefore, examining physicians will consider these standards as a guide to their discretion and not construe them too strictly or arbitrarily. The examination will be carried out with the utmost care in order that no individuals who are unfit for service will be accepted, only to be discharged within a short time on certificate of disability. All minor defects as well as disqualifying defects will be recorded in order to protect the Government in the event of future claims for disability compensation. The likelihood of subsequent claims on account of disability should be borne in mind by the examiners in considering the qualifications of registrants with questionable defects. Whenever a registrant is accepted for military duty but who, nevertheless, has a disease or other physical condition which although not disqualifying requires medical treatment, the nature of the condition and the need for treatment will be clearly stated on the report of physical examination.

4. **Physical classification.**—*a. General service.*—Physically qualified for general military service. Registrants will be recommended for assignment for general service if they meet the requirements therefor throughout the entire physical examination. In those borderline cases, where a question is raised as to whether an individual should be classified for general or limited service, preference will be given to his initial classification for general service if the chief medical examiner has reason to believe the man can perform general military service duty.

b. Limited service.—Physically unfit for general military service, but qualified for limited military service. Individuals who fail to qualify for general service, and who do not fall below limited-service requirements in any phase of the examination will be recommended for assignment to limited service unless, because of multiple defects, the medical examiners recommend unqualified rejection as nonacceptable.

c. Nonacceptable.—(1) Physically unfit for any military service. All individuals who do not meet the physical requirements of general service, or limited service will be recommended as nonacceptable.

(2) Care will be taken that all defects found will be recorded fully and accurately on the report of physical examination. The defects will be listed in the summary of the physical examination report in the order of their importance. The irremediable, disqualifying permanent defect will be listed as number one and the others in the order of their importance. The major disqualifying defect may be physical or mental.

(3) Any individual recommended as nonacceptable will not be accepted unless specific directions to that effect have been issued by the War Department.

5. **Defects not specifically mentioned in these regulations and hospitalization.**—*a.* If any individual is regarded by the medical examiners as physically unfit for military service by reason of physical or mental defects not specifically noted in these regulations, he will nevertheless be recommended as unsuitable for general service or for limited service, as the case may be. A brief statement of the reasons for the rejection will be entered on the report of physical examination. So far as practicable, however, the physical classification of individuals will conform to the specified requirements.

b. Hospitalization for a period not to exceed 3 days for men whose physical fitness for military service cannot be determined without hospital study is authorized. Military or other Government hospitals will be used for this purpose when practicable. When military or other Government hospitals are not available the use of civilian hospitals is authorized. *Individuals will not be hospitalized when their fitness for military service can be determined otherwise.*

c. All previous instructions in connection with physical standards which are in conflict with these regulations are rescinded.

SECTION II

GENERAL AND MISCELLANEOUS DEFECTS

6. **General service.**—*a.* Individuals with acute pathological conditions, including acute communicable diseases except venereal diseases, from which in the natural course of the disease recovery occurs without sequelae, will be deferred until a final examination shows recovery has occurred without disqualifying sequelae.

b. Malaria, acute, or malaria, chronic, if mild.

c. Uncinariasis, if mild.

d. Remediable incapacity due to recent acute illness, surgical operations, injury, employment or environment in civil life, provided acceptance is deferred until recovery is complete. Following any major surgical operation an individual will be deferred for a sufficient period of time to insure complete recovery without sequelae. The minimum period of deferment following a major surgical procedure will be 3 months. The actual period of deferment longer than 3 months will depend upon the condition for which operated and upon the discretion of the medical examiners.

7. **Limited service.**—There are no general or miscellaneous defects to warrant initial selection for limited service which are not covered elsewhere in these regulations.

8. **Nonacceptable.**—*a.* Carcinoma or other malignant tumor or disease of any organ or part of the body.

b. Active tuberculosis of any degree.

c. Leprosy or actinomycosis.

d. Late syphilis affecting the cerebrospinal or cardiovascular system or the viscera.

e. Chronic metallic poisoning, except argyria.

f. Mycotic infection of the lungs or other internal organs.

g. Acute rheumatic fever, or *verified* history of single or recurrent attacks of rheumatic fever within the previous 2 years.

h. Osteoarthritis or rheumatoid arthritis.

i. Active osteomyelitis of any bone or a substantiated history of osteomyelitis of any of the long bones of the extremities at any time.

j. Filariasis, trypanosomiasis, amoebiasis, or schistosomiasis.

k. Hodgkin's disease.

l. Uncinariasis, if more than mild.

m. Malaria, chronic, if more than mild.

n. Splenectomy for any cause, other than trauma or congenital hemolytic icterus.

o. Leukemia.

Section III

HEIGHT, WEIGHT, AND CHEST MEASUREMENTS

9. Table of standard and minimum acceptable measurements of height, weight, and circumference of chest.

Height	Standard		Minimum	
	Weight	Chest measurement at expiration	Weight	Chest measurement at expiration
Inches	*Pounds*	*Inches*	*Pounds*	*Inches*
60	116	31¼	105	28¾
61	119	31½	107	29
62	122	31¾	109	29¼
63	125	32	111	29½
64	128	32¼	113	29¾
65	132	32½	115	30
66	136	32¾	117	30¼
67	140	33	121	30½
68	144	33¼	125	30¾
69	148	33½	129	31
70	152	33¾	133	31¼
71	156	34	137	31½
72	160	34¼	141	31¾
73	164	34½	145	32
74	168	34¾	149	32¼
75	172	35	153	32½
76	176	35¼	157	32¾
77	180	35½	161	33
78	184	35¾	165	33¼

10. Directions for taking height and weight.—*a.* The measuring rod should consist of a board at least 2 inches wide by 80 inches long, placed vertically, firmly fixed, with accurate graduations of ¼ inch between 58 inches and the top end. Obtain the height by placing horizontally, in firm contact with the top of the head, square against the measuring rod a board of about 6 x 6 x 2 inches, best permanently attached to the graduated board by a long cord. The individual should stand erect with back to the graduated board, eyes straight to the front. The shoes should be removed when the height is taken.

b. The weight should be taken with the clothing removed.

11. General service.—*a.* Those who fall within the requirements for height, weight, and chest measurement given in the table in paragraph 9.

b. Those whose weight is greater than the standards indicated for the height, provided the overweight is not so excessive as to interfere with military training.

12. Limited service.—Individuals who on examination are found to present conditions not within the accepted measurements for weight and chest circumference given in the table, who are otherwise mentally and physically fit, and who do not fall within the nonacceptable class may be accepted for limited military service.

13. Nonacceptable.—*a.* Less than 60 inches in height.

b. Less than 105 pounds in weight.

c. A height of more than 78 inches.

d. Overweight which is greatly out of proportion to the height if it interferes with normal physical activity or with proper training.

14. General considerations.—*a.* Individuals of 76 inches or more in height will be studied for the possibility of gigantism or acromegaly.

b. Examining physicians will use discretion and judgment in accepting registrants with variations in the ratio of height, weight, and chest measurements indicated in the table. When the weight is disproportionate and is believed to be due to some temporary condition, proper allowances may be made, provided it is the opinion of the examining physician that the variation is correctable with proper food and physicial training. No individual will be accepted, however, whose weight is less than 105 pounds.

Section IV

EYES

15. Vision.—Visual acuity will be determined by standard methods. Except as otherwise noted, examine each eye separately, without glasses, covering the other eye with a card (not with the hand). The individual is directed to read the test types from the top of the chart down as far as he can see, and his acuity of vision is recorded for each eye, with the distance of 20 feet as the numerator of a fraction and the size of the type of the lowest line he can read correctly as the denominator. If he reads the 20-foot type correctly, his vision is normal and recorded 20/20; if he does not read below the 30-foot type, the vision is imperfect and recorded 20/30; if he reads the 15-foot type, the vision is unusually acute and recorded 20/15, etc.

16. General service.—*a.* Binocular (both eyes open) vision of not less than 20/40 without glasses, provided the vision in the more defective eye is not less than 20/70 without glasses and provided the defective vision is not due to active or progressive organic disease.

b. Registrants whose visual acuity without glasses is not less than 20/200 in each eye or 20/100 in one eye and 20/400 in the second eye, if vision is correctible to either (1) 20/40 in each eye, (2) 20/30 in the right eye and 20/70 in the left eye, or (3) 20/20 in the right eye and 20/400 in the left eye, and provided the defective vision is not due to active or progressive organic disease. The actual possession of suitable glasses by an individual is not required for his acceptance under these standards.

c. Conditions due to iridectomy or other operation upon the eye, if the condition for which the operation was performed has been relieved and the vision is within or above the minimum standard requirements.

d. Nystagmoid movements, if not persistent or pronounced and if true nystagmus is excluded.

e. Chronic simple conjunctivitis, if mild.

f. Slight adhesion of the lids to the eyeball.

g. Small pterygium not encroaching on cornea so as to interfere with vision.

h. Ptosis which does not interfere with vision.

i. Color blindness.

j. Exophthalmos, if not of such degree as to have led to or threatened corneal ulceration and provided hyperthyroidism is excluded.

k. Blepharitis marginalis, if mild.

l. Blepharospasm, if mild.

m. Superficial corneal ulcer, provided acceptance is deferred until ulcer is healed without disqualifying impairment of vision.

17. Limited service.—*a.* A minimum vision of 20/400 in each eye without glasses, correctible to 20/40 in one eye and 20/70 in the second eye, or 20/30 in one eye and 20/100 in the second eye.

b. Loss of one eye (anophthalmos) or any degree of defective vision in one eye from below 20/400 to no light perception, if such defective vision is not due to active or progressive organic disease, with vision in the other eye of 20/100 without glasses, correctible to 20/20 with glasses.

18. Nonacceptable.—Defects such as the following:

a. Vision less than the minimum requirements for limited military service.

b. Deformity of the eyelid or eyelids, such as inversion or eversion of a degree that forcible closure fails to cover the eyeball or in which there is a resultant conjunctival inflammation, corneal irritation, or a restriction of the rotation of the eyeball.

c. Lagophthalmos, if extreme.

d. Pronounced exophthalmos.

e. Chronic keratitis.

f. Chronic recurrent inflammatory disease of the cornea or uveal tract.

g. Chronic ulcer of cornea.

h. Any active disease of the retina, choroid, or optic nerve.

i. Detachment of the retina.

j. Nystagmus.

k. Glaucoma.

l. Diplopia due to paralysis of extrinsic ocular muscles, unless mild in degree.

m. Abnormal condition of eyes due to disease of the brain.

n. Trachoma.

o. Any tumor of the orbit.

p. Permanent and well-marked strabismus (over 30 degrees deviation).

q. Ptosis interfering with vision.

r. Trichiasis.

s. Chronic conjunctivitis, other than mild, simple.

t. Chronic dacryocystitis.

u. Pterygium interfering with vision.

19. Visual tests for detection of malingerers.—*a.* Malingerers may feign inability to open their eyes, total loss of vision in one or both eyes, or impaired vision in one or both eyes. Occasionally, an inflammation in the eyes will be produced by putting sand or other irritating substance under the lids.

b. Malingerers who wish to evade military service by feigning impairment of vision may be divided into two classes, as follows:

(1) Those who claim total loss of vision in one eye.

(2) Those who claim partial loss of vision in one or both eyes. Either group may have a normal acuity of vision or may exaggerate a defect actually present.

c. In testing for malingering the examining physician will bear in mind that detection is more likely to result when the man is allowed to believe that his case is regarded from the first as genuine and that his story is not discredited. There is something indefinable in the bearing of the malingerer which experience alone can detect. He may be self-assertive and overconfident; he may be hesitant or evasive. Careful observation will be made of his conduct and every movement noted. The nature of the man's answer will be taken into account and considered in the light of the kind of reply that is given when a nonmalingerer is being examined.

d. The following equipment should be available:

(1) Trial frame, blank, spherical lenses: +16, +3, +0.25, −3, −2, −1, −0.25.

(2) Two prisms, one 6° and one 10°.

(3) Ophthalmoscope (electric battery in handle).

(4) Condensing lens.

(5) Loupe.

(6) Red and green letters on glass:

(a) Letters varying in size.

(b) Spectacle frame containing red and green glasses.

(7) Special test cards, one a duplicate, with letters reversed to use with a mirror.

(8) Special illiterate test cards.

(9) Mirror large enough to reflect test cards.

(10) One stereoscope with special card.

(11) Retinoscope (electric, with battery in handle).

(12) Ruler about 1¼ inches wide.

(13) Three disks of pollaroid 36 mm. in diameter and 2 mm. thick.

e. The principle involved in the polaroid test is that light polarized in any given meridian by a polaroid screen is selectively absorbed by an analyzing polaroid screen whose axis is at an angle to the axis of the polarizing screen. The test may be conducted as follows: Three disks of polaroid 36 mm. in diameter and 2 mm. thick are required. They are held in the ordinary trial frame with the handle corresponding to the polarizing axis. One polaroid disk is placed before each eye with the polarizing axis horizontal. The individual is then asked to read the smallest possible line of letters on the test chart with both eyes open. Immediately, the third polaroid disk is rotated so that the polarizing axis becomes vertical for the length of time that it takes to read three or four letters. The rotation of the third disk to the vertical position prevents the passage of any light, so that, if the reading of the test chart is continued during this time, it is

very evident that the poor eye is functioning. The disk may be used with correcting spectacle lenses if necessary. Care must be exercised to see that the poor eye is not closed while the polarized disk before the other eye is at right angles. Also, the good eye must be occluded by the opposed polaroid disk for only a short period at a time so that the individual does not become aware of the momentary elimination of visual acuity in that eye.

20. Other methods of examination.—*a. To verify total loss of vision in one eye.*—(1) A 6° prism, base down, is placed before the admittedly sound eye while the man looks at a distant light or candle. If he sees two candles, binocular vision is proved. The examiner may vary the test by placing the prism before the "blind" eye, either base up or base down.

(2) A prism of 10°, with base outward, is placed before the "blind" eye. If there is any sight in this eye, double vision will be produced and the eye will be seen to move inward to correct it and fuze the two images.

(3) The alleged "blind" eye is covered. A prism of 10°, with the apex up, is placed before the "seeing" eye in such a position that its edge lies horizontally across the center of the pupil. This produces monocular diplopia. The prism is then moved upward so as to be completely in front of the good eye and at the same time the "blind" eye is uncovered. If diplopia is produced or admitted, there is sight in the "blind" eye.

(4) *Test with colored glasses and letters.*—This consists in directing the individual to read a row of special red and green letters on glass through a special red and green glass. The red letters will be invisible to the eye that has the green glass, and vice versa, but if all the letters are correctly read, irrespective of their color, there must be sight in the "blind" eye. The proper illumination back of the chart must be observed. This test is not applicable to individuals who are color blind to red and green.

(5) *Test with trial glasses.*—A high-plus glass is placed before the good eye and a low-plus or minus before the "blind" eye. If the distant type is read, the vision in the "blind" eye is good.

(6) *Stereoscope test.*—This may be made with ordinary stereoscope, the printed matter so arranged that certain portions of it are not present before one of the eyes.

(7) *Bar test.*—Interpose a ruler about 1¼ inches wide vertically midway between the two eyes at about 4 to 5 inches' distance; direct the man to read from a printed page with lines at least 4 inches long. If able to read the lines, binocular vision exists.

(8) The action of the pupil must be carefully tested, there usually being no movement to light stimulation when the eye is blind. If the examiner is not satisfied, the following examination will be made:

(a) *Oblique examination.*—A careful examination of the cornea will be made with the aid of a condensing lens and a loupe.

(b) *Ophthalmoscopic examination.*—A searching examination with the ophthalmoscope will be made, together with an estimation of the refractive error. The pupil will be dilated if necessary.

b. To verify partial loss of vision in one or both eyes.—(1) The most common manifestation of malingering takes the form of a statement that one eye is imperfect. Men pleading this disability may be divided into two classes:

(a) Those who pretend to have a visual defect.

(b) Those who are aware that they have a visual defect and exaggerate its effect.

(2) No hard-and-fast tests can be prescribed for the detection of these cases. Much depends on the alertness and ingenuity of the examining physician.

(3) The tests with prisms are not applicable here, for there is not pretended blindness in one eye, but simply an alleged diminution of visual acuity.

(4) If a room 30 to 40 feet long can be obtained for testing vision, place the individual suspected of malingering at 30 to 35 feet from the test chart. Direct him to read the letters and note the result. He should then be brought up to 20 feet from the card and retested. If he still reads only the same line and does not read any of the smaller type, he is malingering.

(5) *Mirror test with special cards.*

(*a*) Test cards are used which are identical, one having the letters reversed. The registrant is directed to read the letters on the chart across the room and then in a mirror beside it which reflects reverse letters that are placed over his head. The letters seen in the mirror are located double the distance of the direct letters from the man being examined. The malingerer is apt to read in the mirror the line which he read on the first card, showing that his vision is twice as good as he pretends.

(*b*) In order to obviate the use of test letters in the mirror test, various common objects approximating the size of the 20/40 and 20/30 letters may be used by asking an individual to differentiate between a dime and a penny, a cigarette and a pencil, a pen and a pencil, the number of spots on playing cards, or between the different aces, held on either side of his head and reflected in the mirror at 20 feet distance.

(6) *Trial frame test.*—Place a trial frame upon the man's face and put before the sound eye a high convex lens (+16D) and before the "weak" eye a plane or weak lens (0.25) which will not interfere with vision. If letters placed at a distance of 20 feet are read, the fraud is at once exposed.

(7) *Oblique examination.*—This is conducted with condensing lens and loupe to determine corneal or lenticular opacities.

(8) *Ophthalmoscopic examination.*

(a) It is probable that the malingerer will resist the ophthalmoscopic examination by frequent winking or rolling of the eyes. In this event, it is best to caution the man that a report of his vision must be made, and then to postpone further examination until after the next few individuals have been examined.

(b) Use the ophthalmoscope as an aid in estimating the refractive error. If no error of marked degree exists and the media and fundi are normal, the relation between the alleged vision and the refractive condition furnishes an important clue. If the error is about +4 or —2, the visual acuity could be about 20/100 but when the defect cannot be accounted for objectively and the vision is brought from 20/100 to 20/50 or 20/30 by means of a low-plus or minus glass, the man is malingering.

(9) *Retinoscopy.*—Look for corneal and lenticular opacities and estimate refractive errors.

c. Occupation.—(1) The man's occupation in civil life may have been such that it could not have been followed without more vision than he claims.

(2) In the absence of ocular defects, continuous and persistent blepharospasm, the use of colored glasses, eye shades, or eye bandages will be regarded with suspicion.

d. Diplopia.—Cases of malingering are occasionally met with in which the men complain that they see double. These must be investigated with the application of the ordinary tests as if they were genuine and with every precaution taken to guard against a serious nerve lesion being overlooked.

Section V

EARS

21. Examination for disease.—The external ears and mastoid region will be examined by inspection and, if necessary, the mastoid region by palpation. The external auditory canal and membrana tympani will be examined by reflected light or by a self-illuminating otoscope. Cerumen will be removed, if necessary, in order to visualize satisfactorily the membrana tympani.

22. Determination of auditory acuity.—Acuity of hearing will be determined by the whispered voice test. To determine the acuity of hearing, place the registrant facing at right angles to the assistant, 15 feet distant, with ear to be tested toward the assistant, and direct him to repeat promptly the words spoken by the assistant. If the registrant cannot hear the words at 15 feet, the assistant will approach foot by foot, using the same whisper, until the words are correctly repeated. Examine each ear separately, closing the other ear by pressing the tragus firmly against the meatus; the examiner may face the same direction as the registrant and close one of his own ears in the same way as a control: The assistant will use a whispered voice produced by speaking with the lungs in a state of complete exhalation so as to assure as great uniformity of sound output as possible. The whisper should be plainly audible to the examiner and use will be made of numerals, names of places, or other words or sentences, until the condition of the registrant's hearing is evident. The acuity of hearing will be expressed as a fraction, the numerator of which is the distance in feet at which the words are heard by the normal ear; thus 15/15 indicates normal hearing, 10/15 partial hearing of a degree indicated by the fraction; that is, the registrant hears at 10 feet distant the words which the normal ear hears at 15 feet.

23. General service.—*a.* Hearing in each ear of 8/15 or better, or 15/15 in one ear and less than 8/15 in the other.

b. Healed scar of mastoid operation without marked deformity and if hearing is not below requirements.

24. Limited service.—There are no defects in hearing that warrant initial classification for limited service.

25. Nonacceptable.—Defects such as—

a. Hearing less than the minimum hearing prescribed under general service.

b. Purulent otitis media with or without mastoiditis.

c. Perforation of the membrana tympani.

d. Acute or chronic mastoiditis.

e. Total loss of an external ear.

f. Severe atresia of the external auditory canal.

26. Tests for malingering in hearing.—Individuals who are malingerers in regard to hearing usually claim magnification of slight imperfection on one side with a complaint of past trouble. Exaggeration of defects in hearing extends

usually to declarations of total deafness on one side. The following directions will be observed in examining suspected malingerers:

a. In making these examinations the observer will have a skilled assistant and all communications between them will be in a low, whispered voice.

b. The assistant will stand at the back of the suspected malingerer and will, at the direction of the examining physician, obstruct the ears of the suspect as directed, by pressing the tragus firmly into the auditory meatus.

c. The suspected malingerer's eyes will be securely and completely blindfolded.

d. An accurate notation will be made of which ear is deaf as claimed by the individual. Then a critical examination of the auditory canal, membrana tympani, and for patency of the eustachian tubes will follow.

e. Then an accurate test of the normal ear will be made.

f. If the suspect gives markedly conflicting statements, when the normal ear is tightly plugged, as to the distance at which he hears the voice, it is fair to assume that he is a malingerer.

g. The simplest and most available test for malingering is the use of an ordinary binaural stethoscope. The tubing leading to the earpiece to be applied to the normal ear is occluded by clamping with a hemostat and the earpieces are placed in the ears of the blindfolded suspect. The examining physician speaks in a soft tone or counts into the bell-shaped chest portion of the stethoscope and the suspect is told to repeat what he hears. The tubes are removed from the ears, and the assistant is told to occlude the normal ear. The same words or numerals are repeated. The suspect will now claim failure to hear the words or numerals which he had previously heard through the tube with the allegedly deaf ear.

h. Erhard's test is another simple method for malingerers which requires no special apparatus. If the external auditory canal of a normal ear is tightly packed with absorbent cotton, it will still conduct sound waves to a limited degree, a loud-ticking watch even under these circumstances being heard about 1 or 2 meters. The suspect has his ear which is stated to be deaf occluded with cotton, and then the test is made with the hearing of the normal ear, the suspect being told to count the ticks of the watch. The suspect's normal hearing ear is then occluded with cotton and the testing is made with the unoccluded supposedly deaf ear. Under this test, if he claims failure to hear the watch under 1 meter, he is malingering.

i. The Chiman-Moos test is made with the C2 tuning fork. The vibrating tuning fork is held at equal distance from each ear. The suspect may claim that he hears it better in the normal ear. The vibrating tuning fork is then placed on the vertex of the skull. The suspect hearing it equally well in both ears will at first hesitate and then state he hears it better in the normal ear. In diseases of the conducting apparatus he will hear it better in the diseased ear. If now the external meatus of the normal ear is tightly closed and the vibrating tuning fork is placed upon the vertex of the skull, the individual with the diseased ear will state he hears it better in the normal, closed ear, or it may be impossible for him to decide in which ear he perceives the tone better. The suspect, with the normal ear tightly obstructed, will state that he does not perceive the sound of the fork when thus placed on the vertex of the skull.

Section VI

MOUTH, NOSE, FAUCES, PHARYNX, TRACHEA, ESOPHAGUS, AND LARYNX

27. General service.—*a.* Enlarged tonsils.

b. Adenoids.

c. Deviation of the nasal septum or enlarged turbinates which do not interfere more than mildly with nasal breathing.

d. Acute primary sinusitis, provided the acceptance of the individual is deferred for reexamination until after a reasonable time has elapsed and the sinusitis has disappeared.

e. Hay fever, if mild.

28. Limited service.—*a.* Deviation of the nasal septum or enlarged turbinates which do not interfere more than moderately with nasal breathing.

b. Hay fever, if moderate.

29. Nonacceptable.—Defects such as—

a. Deformities of the mouth, throat, and nose which interfere with mastication of ordinary food, with speech, or with breathing.

b. Destructive syphilitic disease of the mouth, nose, throat, larynx, or esophagus.

c. Laryngeal paralysis due to any cause.

d. Tracheotomy.

e. Stricture of the esophagus.

f. Chronic sinusitis of the accessory sinuses of the nose. (This diagnosis will be established by the presence of a chronic purulent nasal discharge, large nasal polypi, and other signs and symptoms and confirmed by transillumination or X-ray examination, or both.)

g. Chronic atrophic rhinitis with offensive odor (ozena).

h. Malignant neoplasms.

i. Nasal obstruction due to septal deviation, hypertrophic rhinitis, or other causes, if sufficient to cause mouth breathing.

j. Aphonia.

k. Hay fever, if severe.

l. Chronic laryngitis.

m. Perforation of the hard palate.

n. Stricture or other organic disease of the esophagus.

o. Harelip.

p. Perforation of the nasal septum associated with interference of function, or ulceration or crusting, and when due to organic disease.

30. Use of diagnostic aids.—Examining physicians will make use of laryngoscopy, transillumination of the sinuses, and X-ray when available to determine more definitely the physical fitness of individuals who have defects involving the upper air passages, head, or esophagus when such diagnostic aids are indicated.

Section VII

DENTAL REQUIREMENTS

31. General service.—*a.* Individuals who are well nourished, of good musculature, are free from gross dental infections, and have a minimum requirement of an edentulous upper jaw and/or an edentulous lower jaw, corrected or correctable by a full denture or dentures.

b. Malocclusion.—When it is evident from the individual's general physical condition that his malocclusion has not seriously interfered with the mastication of a normal diet, provided that in the excursions of the mandible or with the

mandible at rest, the teeth do not impinge upon opposing soft tissues and that the malocclusion has not resulted in secondary pathological changes.

32. Limited service.—There are no dental conditions that warrant classification as limited service.

33. Nonacceptable.—*a.* Diseases of the jaws and associated structures which are irremediable or not easily remedied, or which are likely to incapacitate the individual for satisfactory performance of military duty.

b. Extensive loss of oral tissue in an amount that would prevent replacement of missing teeth by a satisfactory denture.

34. General considerations.—Examining dentists, to protect the interest of the Government and the individual, will exercise every care to clearly indicate the status of every tooth, as well as those extracted, missing, or unerupted. The exact teeth replaced by a prosthetic appliance or bridge (with abutments), as well as the serviceability of the appliance will be recorded. Defects, infections (including pyorrhea) will be listed and classified as to severity.

Section VIII

SKIN

35. General service.—*a.* Acute nonexanthematous and noncommunicable diseases of the skin which ordinarily run a temporary course.

b. Diseases which are trivial in character and which do not interfere with the general health and are not incapacitating. Among these common and usually trivial diseases may be enumerated—

(1) Acne, mild or moderate. (Care must be taken to exclude individuals with chronic severe acne, particularly when the face is involved to the extent of being markedly disfiguring or the shoulders extensively involved, making it likely to be aggravated by shoulder straps or packs or by other military equipment.)

(2) Anomalies of pigmentation.

(3) Scars not extensive, disfiguring, nor incapacitating in character.

(4) Warts, except plantar warts on weight bearing areas.

(5) Skin infections, if mild and considered of no significance.

(6) Acute eczema, if mild.

(7) Naevi which are not greatly disfiguring and are not so located as to be subject to irritation or trauma by the normal wearing of military equipment.

(8) All forms of pediculosis.

(9) All forms of ringworm, unless severe and not easily remediable.

(10) Scabies, unless severe and not easily remediable.

(11) Mild and not extensive psoriasis.

c. Simple ulcers or other acute pathological conditions of the skin which are easily curable.

d. Unusual skin conditions should arouse suspicion of self-inflicted lesions (dermatitis factitia). (See section XXIII.)

e. True alopecia areata, provided the existence of disqualifying endocrine, neurological or other disqualifying conditions are excluded.

36. Limited service.—There are no skin criteria to warrant initial selection for limited service.

37. Nonacceptable.—Serious or incapacitating skin disorders such as—

a. Chronic skin disease, chronic ulcers of the skin, or cured syphilitic lesions which are so severe as to incapacitate the individual for the duties of a soldier

or so disfiguring as to render the individual objectionable in common social intercourse.

b. Actinomycosis.

c. Dermatitis herpetiformis of long duration.

d. Epidermolysis bullosa.

e. Generalized dermatitis of long duration.

f. Allergic dermatoses, if severe.

g. Mycosis fungoides.

h. Chronic pemphigus.

i. Lupus vulgaris.

j. Elephantiasis.

k. Ringworm, if very severe and not easily remediable.

l. Psoriasis if other than mild.

m. Scabies, if very severe and not easily remediable.

n. Cysts and benign tumors of the skin of such size and/or location as to interfere with the normal wearing of military equipment.

o. Pilonidal cyst or sinus. (If there is only a simple dimpling of the skin or short simple sinus in the post-anal region, the individual will be accepted for general service.)

p. Plantar warts on weight-bearing areas.

Section IX

HEAD

38. General service.—*a.* Moderate deformities of the bones of the skull such as depressions, exostoses, etc., unassociated with evidence of disease of the brain, spinal cord, or peripheral nerves and not preventing the individual from wearing military headgear.

b. Abnormalities which are apparently temporary in character resulting from recent injuries. (These include severe contusions and other wounds of the scalp and cerebral concussion. Individuals with these conditions will have the final examination temporarily deferred for 3 months.) See paragraph 90 *e* and 91 *h*.

39. Limited service.—There are no head defects to warrant initial selection for limited service.

40. Nonacceptable.—*a.* Deformities of the skull in the nature of depressions, exostoses, etc., of a degree which would prevent the individual from wearing military headgear.

b. Deformities of the skull of any degree associated with evidence of disease of the brain, spinal cord, or peripheral nerves. See paragraph 90 *e* and 91 *h*.

Section X

SPINE, SCAPULAE, AND SACROILIAC JOINTS

41. General service.—*a.* Lateral deviation of the spine of 1 inch or less from the midline if the mobility and weight-bearing power are good.

b. Fracture of the coccyx.

c. Prominent scapulae not interfering with wearing of uniform or military equipment.

d. Complaint of disease of the sacroiliac and lumbo-sacral joints which is unassociated with objective signs and symptoms.

e. Fracture of the spine or pelvic bones which has healed without marked deformity and which has not interfered with the following of a useful vocation in civil life.

f. Spina bifida occulta providing it is asymptomatic, unassociated with objective signs and symptoms and can be demonstrated by X-ray examination only.

42. Limited service.—Lateral deviation of the spine from the midline of more than 1 inch and less than 2 inches.

43. Nonacceptable.—Conditions such as—

a. Tuberculosis, either active or healed.

b. Osteoarthritis or rheumatoid arthritis; or chronic arthritis from any cause.

c. Healed fractures of the vertebrae or pelvic bones with associated symptoms which have prevented the individual from following a useful vocation in civil life.

d. Lateral deviation of the spine from the midline of more than 2 inches. Curvature of the spine (scoliosis, kyphosis or lordosis) of a degree sufficient to interfere with the wearing of a uniform or military equipment or which has prevented the individual from following a useful vocation in civil life.

e. Disease of the sacroiliac and lumbo-sacral joints which is of a chronic type and is obviously associated with pain referred to the lower extremities, muscular spasm, postural deformities, and limitation of motion in the lumbar region of the spine.

f. Nucleus pulposus (herniation intervertebral disc) or history of operation for this condition.

44. X-ray examination.—When examining physicians are in doubt concerning the cause and the extent of disease of the bones and joints, an X-ray examination will be made.

Section XI

EXTREMITIES

45. General service.—*a.* Old or recent fractures which have healed normally with no resulting impairment of function.

b. Recent injury of a bone or joint with or without fracture or dislocation which, in the opinion of the examiners, is only temporarily incapacitating. (Individuals with these conditions will be given a period of time not less than 6 weeks for recovery before the final examination is made.)

c. Webbed fingers and toes, unless severe in degree.

d. Entire loss of little finger of either or both hands, or the ring finger of the left hand.

e. Loss of terminal phalanx of the right index finger; loss of the terminal and middle phalanges of one finger, except the right index finger, on one or both hands; loss of one phalanx of one or all fingers on one or both hands, provided the function of the hand is ample to permit the performance of general military duty.

f. Scars and deformities of moderate degree of the hand or hands which do not interfere with normal function.

g. Stiff fingers of a degree not to interfere with function.

h. Flat foot unless accompanied with symptoms of weak foot or when the foot is weak on test. Pronounced cases of flat foot attended with decided eversion of

the foot and marked bulging of the inner border, due to inward rotation of the astragalus, and rigid flat foot are disqualifying regardless of the presence or absence of subjective symptoms.

i. Hammertoe which does not interfere with the wearing of a military shoe.

j. Hallux valgus, unless severe.

k. Absence of one or two of the small toes of one or both feet, if function of the foot is good.

l. Ingrowing toenails, unless severe.

46. Limited service.—*a.* Loss of two entire fingers of either hand, except a combination of the right index and middle finger.

b. Webbed fingers or toes, if severe in degree.

c. Moderate deformities of one or both upper extremities which do not and have not interfered with function to a degress to prevent the individual from following a useful vocation in civil life.

d. Abduction and pronation of the foot (knock-ankle) when this condition is not associated with rigidity of the tarsal joint or with deformity of the foot.

e. Loss of great toe.

f. Loss of dorsal flexion of great toe.

g. Clubfoot of slight degree is tarsal, metatarsal, and phalangeal joints are flexible, permitting wearing of the military shoe, and, in the opinion of the examiner, will not interfere with the performance of military duty .

h. Slight claw toes not involving obliteration of the transverse arch and which do not interfere with the wearing of a military shoe.

i. Other defects of the feet which disqualify for general military service but do not prevent the individual from wearing a military shoe and which have not prevented him from following a useful vocation in civil life.

j. Moderate deformities of one or both lower extremities which do not and have not interfered with function to a degree to prevent the individual from following a useful vocation in civil life.

k. Adherent scars of the skin and soft tissues of an extremity, if not incapacitating and not likely to break down.

l. Healed disease or injury of wrist or elbow with resulting limitation of motion, if not severe in degree.

m. Internal derangement of knee joint.—(1) History of, providing disability has been mild and infrequent;

(2) Operation for, providing a period of 6 months has elapsed since operation with freedom from symptoms.

Under (1) and (2) above, the knee ligaments should be stable in lateral and anteroposterior directions in comparison with the normal knee; the X-ray should be negative; the thigh musculature not weak or atrophic enough to interfere with function and the full active motion in flexion and extension is present.

47. Nonacceptable.—Defects such as—

a. Loss of one or both thumbs.

b. Loss of more than two entire fingers of either hand.

c. Tuberculosis of a bone or joint.

d. Old ununited fractures.

e. Old unreduced or recurring dislocations of any of the major joints.

f. Disease of any bone or joint healed with such resulting deformity or rigidity that the function is impaired to a degree that it will interfere with military service.

g. Muscle paralysis or contraction which disturbs function to the degree of interference with military service.

h. Adherent scars of skin or soft tissue to a degree which seriously interfere with function.

i. Varicose veins, if severe in degree or if associated with edema or with present or previous ulcer of the skin.

j. Rigid flat foot or flat foot when accompanied with symptoms of weak foot or when the foot is weak on test. Pronounced cases of flat foot attended with decided eversion of the foot and marked bulging of the inner border, due to inward rotation of the astragalus, are disqualifying regardless of the presence or absence of subjective symptoms.

k. Obliteration of the transverse arch associated with permanent flexion of the small toes (claw toes).

l. Hallux valgus, if severe and associated with marked exostosis or bunion.

m. Clubfoot, if marked in degree or which intereferes with the wearing of a military shoe.

n. Diseases of the bone or of the hip, knee, or ankle joint which interfere with function and weight-bearing power.

o. Deformities due to fracture or other injury which seriously interfere with function and weight-bearing power.

p. Sciatica which is apparently intractable and disabling to the degree of interference with the function of walking and weight-bearing power.

q. Amputations of extremities in excess of those already cited.

r. Active osteomyelitis of any bone, or a substantiated history of osteomyalitis of any of the long bones at any time.

s. Osteoarthritis or rheumatoid arthritis; or chronic arthritis from any cause.

t. Plantar warts on weight bearing areas.

48. General considerations.—It is important that individuals with defects of the feet which would prevent them from taking proper training will not be classified for general military service.

Section XII

NECK

49. General service.—*a.* Nonspastic contraction of the muscles of the neck which is not of great degree and will not prevent the wearing of a uniform or military equipment.

b. Simple goiter unassociated with pressure symptons, provided the enlargement of the thyroid will not interfere with the wearing of a uniform or military equipment.

c. Enlarged lymph nodes of the neck which are not a manifestation of systemic disease, do not apparently interfere with the general health, and are not large enough to interfere with the wearing of a uniform or military equipment.

d. Healed tuberculous lymph nodes when few in number and densely calcified.

e. History of thyroidectomy for nontoxic goiter.

50. Limited service.—History of thyroidectomy for toxic goiter with complete absence of active manifestations for two years.

51. Nonacceptable.—*a.* Toxic goiter.

b. Tumor of thyroid or other structures of the neck, including enlarged lymph nodes and benign tumors of the neck, if the enlargement is of such degree as to interfere with wearing of a uniform or military equipment.

c. Enlargement of the lymph nodes of the neck associated with leukemia or Hodgkin's disease.

d. Lymphosarcoma.

e. Tuberculous lymph nodes, except as specified in 49 *d.*

f. Nonspastic contraction of the muscles of the neck or cicatricial contraction of the neck to the extent that it interferes with the wearing of a uniform or military equipment or so disfiguring as to render the individual objectionable in common social intercourse.

g. Spastic contraction of the muscles of the neck.

h. Simple goiter, if associated with pressure symptoms confirmed by X-ray, or if enlargement is of such a degree to interfere with wearing of a uniform or military equipment.

SECTION XIII

LUNGS AND CHEST WALL

52. Chest examination.—The chest examination will include a roentgenogram, as well as the usual methods of physical diagnosis. A pertinent history of past chest diseases will be taken. Because of its importance and frequency, special consideration must be given to the detection of tuberculosis.

53. History.—Inquiry will be made about previous and present symptoms of respiratory disorders, particularly if abnormalities of the chest are discovered, if the weight is below normal without other explainable cause, if there is unexplained fever, or if there are indications of possible tuberculous lesions in other parts of the body, such as fistula in ano or enlarged lymph nodes. The history of chronic or frequently recurring cough and expectoration, hemoptysis, pleurisy, or chronic laryngitis requires special investigation for a cause. It must be remembered, however, that pulmonary tuberculosis may exist in its earliest stages without producing any symptoms.

54. X-ray examination.—Chest X-ray films will be made as part of the physical examination of all selectees, applicants for voluntary enlistment of any type, and applicants for reenlistment, and will serve as permanent records. Care will be exercised in processing these films to insure their keeping qualities. It is imperative that these films be clearly marked as outlined in paragraph *a* below.

a. Identification of films.—(1) Identifying marks which are photographed on the film at the time of its exposure are most satisfactory. When the photoroentenographic method of X-ray examination is employed, this may be accomplished with the special attachment which forms an integral part of the camera Unit. With standard X-ray equipment as much identifying data as possible should be recorded on the film at the time of exposure by use of lead numbers, lead foil stencils, or other suitable means. The additional identifying data required should be added in ink at the bottom of the film. The Army serial number in most cases cannot be recorded photographically at the time the film is made, as the examination precedes acceptance. The serial number will be added as soon as practicable after the film is processed, either in ink or with a perforating machine making letters and figures of appropriate size, and is to be recorded on the light portion of the film corresponding to the subdiaphragmatic area. Data photographically recorded will be located in the upper right and left corners of the film. It is essential that the photographed identification be clearly legible without magnification. Photographing of the caption in such a way that it may

be read when the film is viewed with the heart to the observer's left is recommended.

(2) The minimum identifying data will be: place of examination; date; individual's last name, first name and middle initial; his home address; Army serial number; age in years; weight in pounds; abbreviation for race and, in the case of Selective Service registrants, the local board identification code number. The abbreviation for race will be W, N, or O, conforming with the specifications for White, Negro, and other registrants in DSS Form 221. Except for the Army serial number, these data can be photographed on the film at the time this is made; they should appear in the upper corners of the film as indicated in the following example:

Armed Forces Induction Station	DOE, John D. 612 Lombard St.
Philadelphia, Pennsylvania	Philadelphia, Pa. Lb 32-050-012
28 July 1943	31 W 156

(The local board identification code number will be found at the right side of the local board stamp placed on DSS Form 221.)

(3) Since serial numbers are not given until men have been accepted for service, all films of accepted men will be held at the home station of the Army examining boards until individual serial numbers have been obtained and entered thereon.

b. Disposition of films made in continental United States and Puerto Rico.—(1) Chest X-ray films made in the examination of men accepted for enlistment or induction into the service, after being carefully checked for proper identification, will be assembled in packages of appropriate size and mailed promptly under penalty cover to the Veterans' Administration, Kansas Avenue and Upshur Street NW., Washington, D. C. All packages of films sent to the Veterans' Administration will be labeled "Exposed X-ray Films" and will show the name of the Army organization making shipment.

(2) All chest X-ray films of individuals who are rejected for any reason will be delivered to the Selective Service System in accordance with agreements entered into between the Service Command and the State Director of the Selective Service System in the State from which the registrants are presented. Subject to such local agreements, films of rejected individuals in general will be separated and forwarded to State directors in appropriately labeled packages as indicated below:

(*a*) "Films of individuals recommended for reexamination in six months, or other specified period, because of borderline tuberculous or other chest conditions."

(*b*) "Films of individuals rejected because of tuberculous or other chest conditions."

(*c*) "Films of individuals rejected because of other than chest conditions."

c. Disposition of films made in Hawaiian Department.—Chest X-ray films made on individuals in the Hawaiian Department will be held there for the present.

55. Physical examination.—This will include inspection, palpation, percussion, and auscultation of the chest.

a. Structural abnormalities of the thoracic wall and striking rapidity, limitation, or inequality of the respiratory movements are to be noted.

b. Abnormal physical signs in the lungs, pleura or mediastinum will be carefully checked to ascertain whether they persist or are only transitory.

c. Particular attention will be focused upon the occurrence of pulmonary rales, which may be elicited only after the expiratory cough. The subject will be instructed to exhale completely with the mouth open, immediately to cough before inhaling, and then to inhale deeply but quietly. Rales are heard most often at the beginning of inhalation after such an expiratory cough. A small patch of persistent rales at the apex, in the interscapular area, or in some other part of the chest may be the only evidence of tuberculosis shown by physical examination.

d. It must be borne in mind that many tuberculous lesions will not produce abnormal physical signs. In other words, the absence of abnormal signs does not exclude tuberculosis.

e. Certain signs may arouse suspicion, but will be disregarded unless X-ray and other studies reveal evidence of disease. These are—

(1) Slightly harsh breath sounds and slightly prolonged expiration over the right apex above the clavicle and the third thoracic spine and/or the same signs at the extreme left apex.

(2) Slight alteration of the breath sounds anywhere in the chest, without other abnormal signs.

(3) Clicks or crepitations which disappear after a few deep breaths or coughs.

56. Other examinations.—It may be necessary to postpone decision in some cases until special studies and adequate observations have been completed. For example, so-called atypical pneumonia in an upper lobe of the lung may simulate tuberculosis, but proper laboratory studies and another X-ray film and physical examination after two months usually suffice to make the differential diagnosis.

57. General service.—*a.* Calcified residuals of primary tuberculosis in the pulmonary parenchyma or hilum lymph nodes, provided the size, number, and character of such lesions are not such as to suggest the possibility of reactivation. Well-calcified masses in adult white subjects usually represent entirely healed lesions. Partially calcified and therefore presumably partially caseous masses in younger subjects, particularly in persons of other than the white race, are potentially hazardous. Clinical judgment is important in rendering a decision. In those cases in which a decision cannot be made on roentgenological grounds alone, it is essential that a careful examination be made by an examiner with special experience in tuberculosis, taking into account the age of the subject, history, and the possible presence of nonpulmonary tuberculosis.

b. Fibrous pleural scars and adhesions, revealed most often in the roentgenogram by simple thickening of the apical pleura, deformity of the dome of the diaphragm, or visualization of an interlobar fissure, provided there is no evidence of disqualifying tuberculosis of the pulmonary parenchyma.

c. Scars of operation for nontuberculous empyema which has been healed for one year or longer, provided the function of the lung is not significantly impaired, and provided no residue of the empyema other than some fibrous thickening of the pleura is evident upon X-ray and physical examination.

d. Healed fracture of the rib or ribs, provided the residual deformity, if any, does not interfere seriously with respiratory movements.

e. Benign tumor of the breast or of the chest wall, provided the mass does not interfere with the wearing of a uniform or military equipment.

f. Small palpable lymph nodes of the axilla which apparently are not evidence of disease.

g. The following conditions are temporarily disqualifying.—(1) Acute bronchitis, until a final examination shows recovery without disqualifying sequelae.

2. So-called atypical or other types of pneumonia, until a final examination shows recovery without disqualifying sequelae. Ordinarily resolution, as shown

by X-ray films, will be complete within two months. Other cause of the shadow in the X-ray film than pneumonia must be considered if complete clearing has not occurred in three months.

(3) Acute or subacute fibrinous pleurisy, definitely nontuberculous in origin, until a final examination shows recovery without disqualifying sequelae. Pleurisy of this type is suspected or demonstrated on physical examination more frequently than on X-ray examination.

(4) Recent fracture of a rib or ribs, until a final examination shows recovery with or without deformity and provided the residual deformity, if any, does not interfere seriously with respiratory movements.

(5) Scarred fibroid or fibrocalcific infiltrative tuberculous lesions of the lungs represented in roentgenograms as *sharply demarcated, strand-like* or *well defined, small, nodular shadows not exceeding a total area of five square cm* may be accepted after deferment until subsequent examination clearly demonstrates that the lesion is stationary and not likely to be reactivated. The minimum period of time to determine this is six months. It must be recognized that either progression or regression of the lesion indicates instability. Clinical judgment, taking into consideration other factors, including age and race, must be exercised in estimating the likelihood of reactivation. Experience indicates a greater likelihood of reactivation of an apparently stable lesion in persons under twenty-five years of age than in older persons.

58. Limited service.—Deformity of clavicle, ribs, or scapula of a degree disqualifying for general military service but not preventing the individual from successfully following a useful vocation in civil life.

59. Nonacceptable.—*a.* Tuberculosis of the lungs or tracheobronchial lymph nodes except as defined in paragraphs 57 *a* and 57 *g* (5). Small infiltrative tuberculous lesions, *unless of sharply defined linear or nodular appearance on roentgenograms*, as described in paragraph 57 *g* (5), are disqualifying even though involving a total area of less than five square cm and apparently stable over a period of six months.

b. Fibrinous or serofibrinous tuberculous pleurisy, and serofibrinous pleurisy of unknown origin. Inasmuch as pleurisy, with or without effusion, is a frequent manifestation of active tuberculosis, all persons who have apparently recovered from pleurisy will be examined with the greatest care. Authenticated history of pleural effusion of unknown origin within the last five years; chronic fibrous pleurisy sufficient to cause marked retraction of the chest wall and of the mediastinum or to cause a density in the roentgenogram which completely obscures a considerable section of the pulmonary fields.

c. Spontaneous pneumothorax, history of spontaneous pneumothorax within the last three years, or history of repeated spontaneous pneumothorax, authenticated by properly dated X-ray films.

d. Empyema; residual sacculation or unhealed sinuses of the chest wall following operations for empyema.

e. Chronic bronchitis.

f. Bronchiectasis.

g. Bronchial asthma.

h. Bullous or generalized pulmonary emphysema.

i. Cystic disease of the lung.

j. Silicosis as represented in the roentgenogram by strand-like and nodular shadows; any other form of severe pulmonary fibrosis.

k. Abscess of the lung.

l. Active mycotic disease of the lung and residual cavitation due thereto.

m. Foreign body in the lung. An individual may be accepted after a foreign body has been removed from a bronchus, provided examination shows recovery without disqualifying sequelae.

n. Tumor of the trachea, bronchi, lung, pleura, or mediastinum.

o. Any malignant tumor of the breast or chest wall.

p. Tuberculosis of the ribs or of other parts of the chest wall.

q. Benign tumor of the breast or of the chest wall of such size and location as to interfere with the wearing of the uniform or military equipment.

60. General considerations.—*a. Tuberculosis.*—An alleged history of tuberculosis will not be considered a cause for rejection unless supported by objective evidence substantiating the claim. However, examining physicians should make every effort to determine the validity of the alleged history by requesting the individual's X-ray films and a summary of the clinical record. This will be necessary only when the present chest X-ray film of an individual alleging a history of tuberculosis reveals no evidence of disqualifying defects. It should be recognized that in some instances moderately extensive pulmonary tuberculosis may resolve, leaving no residuals of disqualifying character or extent visible on X-ray examination. An authenticated history of active moderately or far advanced tuberculosis will be considered as disqualifying. An authenticated history of active minimal pulmonary tuberculosis within the past five years also will be considered as disqualifying. In those cases in which pulmonary tuberculosis has been previously diagnosed on the ground of subjective symptoms and of physical signs which are without pathological significance, the conclusions of examining physicians will be based on their own findings and their own evaluation of the cases.

b. Bronchiectasis.—Not infrequently a routine chest X-ray examination will reveal no obvious abnormalities even though bronchiectasis of marked degree is present. When the history or physical examination suggests the possibility of bronchiectasis, individuals should be held for study under the provisions of section I, paragraph 5 *a* and *b*.

Section XIV

HEART, BLOOD VESSELS, AND CIRCULATION

61. History.—Questions will be asked during the course of the examination concerning past history of rheumatic fever, chorea, spells of rapid heart action, syphilis, and reaction to physical effort which may be helpful in the interpretation of the findings, but chief reliance will not be placed on the history alone.

62. Procedure.—The following procedure will govern in the physical examination of the heart. For the information of the examiners it is suggested that reference be made to the publication adopted and distributed by the American Heart Association entitled "The Nomenclature and Criteria for the Diagnosis of Diseases of the Heart."

a. Location of apex impulse and determination of character.

b. Auscultation of the heart sounds over apex, lower sternum, and second and third interspaces to right and left of sternum, noting accentuation of sounds, the presence of murmurs, rate and rhythm. Compare the heart rate with the radial pulse rate.

c. Inspection of root of neck and upper thorax followed by percussion of first interspace on each side of the manubrium for evidence of aneurysm.

d. Count of radial pulse, observation of its rhythm, and palpation of radial arteries for unusual thickening or high tension.

e. The blood pressure will be routinely measured. It will be determined with the subject in the sitting position. If orthostatic hypotension is suspected, the blood pressure will also be measured while the subject is standing. If the blood pressure appears to be abnormally high, it will be measured after the subject has rested in the recumbent position. When measured in other than the sitting position, a statement will be appended as to the position of the subject at the time of measurement.

f. Exercise (stepping 12 times briskly upon a common chair) will be used in selected cases to bring out significant heart murmurs, but this test in itself is not to be considered a reliable estimate of the functional capacity of the heart.

g. If in doubt about an unexplained tachycardia, take the temperature. Fever that is sometimes not very obvious can account for otherwise unexplained tachycardia.

h. If there is doubt as to the presence of cardiovascular disease, the individual will be held for detailed reexamination.

63. General service.—*a.* A heart will be considered normal when the apex impulse is within the left midclavicular line and not below the fifth interspace; when sounds are normal and there are no thrills or important murmurs; when there is no abnormal pulsation or dullness above the base of the heart; when pulse rate is normal and regular and there is no unusual thickening of the arteries or significant elevation of blood pressure.

b. Given a heart of normal size, responding normally to exercise, a slight to moderate pulmonary systolic murmur, louder in the recumbent position and on expiration and largely or entirely abolished by deep inspiration, is the commonest of all murmurs and is to be considered physiological (functional). A faint systolic murmur localized at the aortic area without thrill and followed by a normal second sound may be considered normal, but any aortic systolic murmur of moderate intensity or louder probably indicates disease (for example, aortic diliation or stenosis), and demands further study. A loud systolic murmur (usually with thrill), maximal at the left of the sternum in the third and fourth spaces, suggests the probability of a congenital ventricular septal defect and is a cause for rejection. A faint sytolic murmur at the apex, varying in intensity, with forced respiration, less well heard in the erect position than when recumbent and unattended by cardiac enlargement or other evidence of heart disease, or by a verified history of rheumatic fever, may be considered to be physiological (functional), but a moderate or loud apical systolic murmur which persists in all phases of resporation and body positions and is intensified by exercise is evidence of abnormality of the heart. Any diastolic murmur heard over any portion of the cardiac area is evidence of disease. The presystolic (or middiastolic) murmur of mitral stenosis may be confined to a small area at or just within the cardiac apex and heard only in the recumbent position (best in the left lateral decubitus and with the bell stethoscopic chest piece) ; it is accentuated by exercise. A slight aortic diastolic murmur, on the other hand, may be heard only along the left sternal border, with the patient erect or leaning slightly forward, best at the end of forced expiration; it is more easily heard with the Bowles stethoscopic chest piece. Frequently, interpretation must be based on cumulative evidence or a number of relatively slight deviations from the normal.

c. A pulse rate of 100 or over which is not persistent and not due to paroxysmal tachycardia. (A pulse rate of 100 or over may be temporary and due to excite-

ment or to recent infection, such as pneumonia or local infections about the nose, mouth, and throat, or may be induced by drugs.)

d. A pulse rate of not lower than 50 per minute.

e. Sinus arrhythmia. (This consists in a quickening of the pulse rate during inspiration and a slowing during expiration and is best recognized with the individual recumbent and breathing deeply.)

f. Elevation of blood pressure from excitement, proved to be temporary.

64. Limited service.—There are no cardiovascular criteria to warrant initial selection for limited service.

65. Nonacceptable.—*a.* Circulatory failure evidenced by definite symptoms such as undue breathlessness, pain, and evidence of congestive failure (engorged neck veins, enlarged liver, edema, as well as dyspnea).

b. Hypertrophy and/or dilatation of the heart evidenced by displacement of the apex impulse to the left of the midclavicular line or below the sixth rib, and of a heaving or diffuse character, or by X-ray evidence.

c. A persistent heart rate of 100 or over when this is proved to be persistent in the recumbent posture and on observation and reexamination over a sufficient period of time, unless in the opinion of the medical examiner the increased cardiac rate is due to psychic reaction and not secondary to any disease condition including infection.

d. Paroxysmal tachycardia if recurrent and disabling. See also section XXIII.

e. Heart block.

f. Any serious disturbances of rhythm such as auricular fibrillation.

g. Valvular disease.

h. Congenital heart disease.

i. Persistent blood pressure at rest above 150 mm. systolic or above 90 mm. diastolic. If the blood-pressure reading is somewhat (10–20 mm.) above 150 mm. systolic on the first reading, it should be repeated after one-half hour's rest recumbent.

j. Thrombophlebitis of one or more extremities if there is a persistence of the thrombus or any evidence of circulatory obstruction in the involved vein or veins.

k. Other abnormalities of the peripheral vascular system, including large varicose veins, Raynaud's disease, Buerger's disease (thromboangiitis obliterans), erythromelalgia, and arteriosclerosis. In doubtful cases special tests should be employed.

l. Aneurysm of any vessel.

m. Pericarditis.

n. Endocarditis.

o. True angina pectoris.

p. Authenticated history of coronary thrombosis, and/or myocardial infarction.

q. Neurocirculatory asthenia (effort syndrome). Usual symptoms of this condition are exhaustion, breathlessness, heartache, and palpitation. These symptoms may follow exertion such as would not produce them in healthy individuals. These, and other symptoms such as dizziness or fainting, may arise without evidence of organic disease sufficient to account for the disability of the individual. Cases of effort syndrome may occur:

(1) As an accompaniment of organic heart disease.

(2) Following infections.

(3) In individuals with poor physique or insufficient training for the work required.

(In some cases more than one of these factors is present.)

It is important to observe that neurocirculatory asthenia should not be confused with tachycardia alone or increased blood pressure alone or both together, although such conditions may be present with neurocirculatory asthenia. The diagnosis must be clear and based on the symptom complex.

r. Orthostatic hypotension or tachycardia.—The blood pressure and pulse rate will be taken with the individual in the recumbent position and after standing 3 minutes. An increase in pulse from normal in recumbent position to 120 beats per minute or more when the individual stands or a decrease of a normal blood pressure (when the individual is recumbent) to values less than 90 systolic and 60 diastolic when the individual stands may be considered evidence of a definite physiologic disturbance and in itself cause for rejection unless the condition is very temporary following an illness, operation, or exhausted state.

s. Acute rheumatic fever, or *verified* history of single or recurrent attacks of rheumatic fever within the previous 2 years.

66. **Electrocardiogram.**—The electrocardiogram is of great assistance in deciding the nature of certain cardiac abnormalities the most important of which are various arrhythmias, defects of conduction, and diseases of the myocardium. The following electrocardiographic findings may be considered to be within the normal range: a P–R interval and a QRS conduction time not exceeding 0.20 second and 0.10 second, respectively; axis deviation not greater than —15 degrees left or +105 degrees right; a diphasic T wave in Lead 2 and/or a negative T wave in Lead 3; Q waves not greater than 3 mm. in Leads 4R and 4F; R waves in Leads 4R and 4F not less than 4 mm. and 2.5 mm. respectively; and elevation of the RS–T segment in Leads 4R and 4F not to exceed 2 mm.

67. **X-ray.**—In doubtful cases, fluoroscopy or teleroentgenography is advised to determine the size and shape of the heart and great vessels. Films should be taken at a distance of 2 meters. The total transverse diameter of the heart is the most useful measurement in estimating cardiac size. If this exceeds the predicted transverse diameter (calculated according to the Hodges-Eyster formula), by more than 1 cm., the heart is considered to be enlarged. In the case of certain short, thick-set men a slightly greater figure may, at the discretion of the examiner, be regarded as wtihin the range of normal, provided no other signs of cardiovascular disease are present. Films taken for the study of the lungs are not suitable for accurate estimation of the size of the heart.

68. **General considerations.**—*a.* It is incumbent upon examining physicians—

(1) To accept for servicemen with functional murmurs or other findings which do not indicate disease and do not impair the individual's ability to undergo severe bodily exertion.

(2) To exclude from active service in the Army any individual affected with disease of the heart or blood vessels which impairs his ability to undergo severe bodily exertion. Although many men with compensated valvular heart disease are able to undergo severe bodily exertion, the question of aggravation in service, especially by activation of rheumatic carditis, is likely to arise and, incidentally, to create a pension problem. Therefore, all individuals with valvular heart disease are to be regarded as unfit for service and will be rejected.

b. Men who desire to serve their country may, from patriotic motives, endeavor to conceal a known valvular lesion which has given no symptoms. On the other hand, men drafted for service may allege or feign symptoms to obtain exemption. Individuals may be expected to present physicians' certificates to substantiate the existence of valvular disease. Many of these may be given in good faith because of inadequate knowledge of the significance of certain physiological murmurs. Such certificates will not be accepted but examiners will satisfy themselves by their personal examinations as to the physical qualifications of individuals.

c. It is necessary, therefore, that the conclusions of the examining physician in doubtful cases be based on objective evidence in the widest sense, including physical signs, cardiac rhythm, measurement of blood pressure, and the observed effect of effort. Nevertheless, in the presence of questionable signs or symptoms, the verified history, especially of rheumatic fever, may be a factor in the final decision. No statement, however, will be accepted as proof of the existence of a cardiovascular defect unless supported by objective evidence.

d. It is the duty of examining physicians to protect the interest of the Government by preventing the entrance into the service of men whose circulatory systems may be expected to break down under the strain. It is also their duty to prevent the exemption or discharge of fit subjects because of unimportant deviations from the normal. They will exercise care in the interpretation of their findings and bear in mind constantly accidental murmurs and other departure from the supposed normal which may occur in perfectly healthy hearts.

Section XV

ABDOMINAL ORGANS AND WALL

69. General service.—*a.* Abdominal scars due to surgical operation or accident which show no hernial bulging.

b. Scar pain when found not associated with any disturbance of function of abdominal wall or contained viscera.

c. Splenic enlargement of mild degree unassociated with evidence of other disqualifying disease.

d. Small benign tumors of the abdominal wall.

e. Internal and external hemorrhoids, if mild in degree.

f. Relaxed inguinal ring provided there is no hernial sac present.

g. Hernia, small umbilical (patent umbilical ring).

h. History of cholecystectomy provided there are no residual disqualifying sequelae.

70. Limited service.—*a.* Hernia, inguinal, which has not descended into the scrotum; femoral.

b. There are no other defects of the abdominal organs or wall to warrant initial selection for limited service.

71. Nonacceptable.—Defects such as—

a. Hernia, inguinal, which has descended into the scrotum; recurrent; postoperative; ventral; umbilical, if moderate or large in size.

b. Acute or chronic cholecystitis with or without cholelithiasis, if diagnosis is confirmed by usual laboratory procedures or authentic medical history.

c. Ulcer of the stomach or duodenum, if diagnosis is confirmed by the usual laboratory procedures or authentic history of gastric or duodenal ulcer.

d. Authenticated history of surgical operations for gastric or duodenal ulcer.

e. Authenticated history of true intestinal obstruction of any kind.

f. Sinuses of the abdominal wall.

g. Stricture or prolapse of the rectum.

h. Fistula in ano.

i. Enlargement of the spleen associated with leukemia, Hodgkin's disease, splenic anemia, or other disqualifying disease; great enlargement of the spleen from any cause.

j. External hemorrhoids sufficient in size to produce marked symptoms. Internal hemorrhoids if large or accompanied with hemorrhage, or protruding intermittently or constantly.

k. Megacolon, diverticulitis, ileitis, and ulcerative colitis.

l. Absence of one kidney.

m. Splenectomy for any cause, other than trauma or congenital hemolytic icterus.

n. Cirrhosis of the liver.

72. General considerations.—*a.* When necessary to confirm a diagnosis, examining physicians will avail themselves of fluoroscopy and roentgenography.

b. When examining physicians are able to command hospital facilities and the necessary diagnostic apparatus, they will, within their discretion, use test meals and chemical and microscopic examination of the stomach contents and stools.

c. Examining physicians will make use of digital rectal examination of defects referable to that region and, when necessary, proctoscopy will also be utilized.

d. Individuals who are found to have parasites or their eggs in stools will have this condition indicated on report of examination.

e. Moderate impulse produced by cough at the inguinal, femoral, or umbilical ring, or at the site of a scar is not necessarily indicative of hernia.

f. In cases of suspected gastric or duodenal ulcer every effort will be made to obtain a trustworthy history, including authentic medical records.

Section XVI

VENEREAL DISEASES

73. General service.—*a.* Gonorrhea, uncomplicated, acute or chronic.

b. Syphilis, except cardiovascular, cerebrospinal, or visceral.

c. Chancroid, uncomplicated.

74. Limited service.—There are no venereal disease criteria to warrant initial selection for limited service.

75. Nonacceptable.—*a.* Stricture of the urethra, severe.

b. Gonorrheal arthritis.

c. Other complications of gonorrhea, including acute prostatitis, seminal vesiculitis and epididymitis.

d. Cardiovascular, cerebrospinal, and visceral syphilis.

e. Granuloma inguinale.

f. Lymphogranuloma venereum (active).

76. General considerations.—Examination for the detection of venereal disease will include inspection of the skin and genitalia for lesions; cardiac and neurological examination to detect late complications of syphilis; blood serological test for syphilis, and in individuals with latent syphilis, spinal fluid tests.

Section XVII

GENITO-URINARY ORGANS

77. General service.—*a.* Mild albuminuria without casts which is proved by observation and repeated examination to be temporary in character or orthostatic in type.

b. Absence of one testicle, unless removed on account of malignant disease or tuberculosis.

c. Undescended testicle which lies within the abdominal cavity.

d. Varicocele of moderate size.

e. Hydrocele of moderate size.

f. Epispadias or hypospadias, if mild in degree.

g. History of unilateral renal calculus with freedom from symptoms and if the X-ray is negative for calculi.

h. Phimosis.

78. Limited service.—*a.* Stricture of the urethra unless severe.

b. Floating kidney. (Floating kidney is one which is freely moveable.)

79. Nonacceptable.—*a.* Acute or chronic nephritis.

b. Stricture of the urethra, severe.

c. Urinary fistula or incontinence.

d. Acute or chronic infections of the kidney.

e. Absence of one kidney.

f. The presence of renal calculus, or a substantiated history of bilateral renal calculi at any time.

g. Chronic pyelitis.

h. Hydronephrosis or pyonephrosis.

i. Tumors of the kidney, bladder, or testicle.

j. Chronic cystitis.

k. Amputation of the penis, if the resulting stump is insufficient to permit normal function of micturition.

l. Hermaphroditism.

m. Hypertrophy of the prostate gland with urinary retention.

n. Epispadias or hypospadias when urine cannot be voided in such a manner as to avoid soiling of clothing or surroundings, or when accompanied by evidence of chronic infection of the genito-urinary tract.

o. Bed wetting, if substantiated by physician's affidavit or by other acceptable documentary evidence.

p. Varicocele, if large.

q. Hydrocele, if large.

r. Undescended testicle which lies within the inguinal canal.

80. General considerations.—*a. Urinalysis.*—(1) Routine urinalysis to include determination of specific gravity and the absence or presence of albumin and sugar will be done on all individuals. Microscopic study of the urine will be done when indicated. Examining physicians should require examinees to void the urine in their presence. It must be emphasized here that prior to voiding the examinee must be examined for the presence of venereal disease. When albumin and/or casts are found in the urine, urinalysis should be repeated not less than twice a day on 2 or more successive days. If the urine shows albumin and/or casts and this condition of the urine is associated with enlargement of the heart, high blood pressure, and other evidences of cardiovascular-renal disease, the diagnosis of chronic nephritis may be made immediately. If the presence in the urine of albumin and/or casts is proved to be inconstant and if the condition is unassociated with evidence of cardiovascular and/or renal disease, decision should lie within the judgment and discretion of the examining physicians. When blood is found in the urine, a thorough study will be made to determine the underlying cause.

(2) When it is deemed necessary, examining physicians will employ X-ray facilities to verify diagnosis of defects of the genito-urinary organs.

SECTION XVIII

ENDOCRINE AND METABOLIC DISORDERS

81. General service.—*a.* Simple colloid goiter, provided the enlargement of the thyroid will not interfere with the wearing of a uniform or military equipment. (See paragraph 49 *e.*)

b. Frolich's syndrome, if mild in degree.

82. Limited service.—*a.* Frohlich's syndrome, if moderate in degree.

b. Pellagra, beriberi, scurvy, sprue, and other nutritional deficiencies, if mild and remediable by diet and appropriate treatment.

83. Nonacceptable.—*a.* Toxic goiter. (It should be remembered that malingerers may use thyroid medication to produce many of the symptoms of thyrotoxicosis.)

b. Simple goiter with definite pressure symptoms or so large in size as to interfere with wearing a uniform or military equipment.

c. Cretinism.

d. Myxedema, spontaneous or postoperative (with clinical manifestations and diagnosis not based solely on low basal metabolic rate).

e. Gigantism or acromegaly.

f. Frohlich's syndrome, if severe.

g. Hyperparathyroidism and hypoparathyroidism when the diagnosis is supported by adequate laboratory studies.

h. Addison's disease.

i. Diabetes mellitus. If sugar is found in the urine, further specimens should be voided in the presence of the physician or unauthorized assistant, and on more than one occasion. In doubtful cases the fasting blood sugar should be determined. Consideration will be given to authentic medical records indicating the existence of diabetes mellitus.

j. Diabetes insipidus. (Before diabetes insipidus is diagnosed malingering by drinking large quantities of water will be excluded.)

k. Persisting glycosuria.

l. Nutritional deficiency diseases (including sprue, beriberi, pellagra, and scurvy) which are severe or not readily remediable or in which the permanent pathological changes have been established.

m. Gout.

n. Simmonds' disease; Cushing's syndrome; other diseases due to a disorder of the pituitary gland.

o. Hyperinsulinism when established by adequate investigation and if regarded by the examiners as of sufficient degree to disqualify for military service.

SECTION XIX

DISEASES OF BLOOD AND BLOOD-FORMING TISSUES

84. General service.—*a.* Secondary anemia, mild, due to easily remediable causes.

b. Malaria, acute or chronic, mild.

85. Limited service.—There are no diseases of this group which warrant initial selection for limited service.

86. Nonacceptable.—*a.* Hemophilia.

b. Thrombocytopenic purpura.

c. Pernicious anemia.

d. Aplastic anemia.

e. Hemolytic ictero-anemia (hemolytic jaundice).

f. Splenic anemia.

g. Polycythemia vera.

h. Leukemia, acute or chronic, of any type.

i. Malaria, chronic, if more than mild.

j. Sickle cell anemia.

k. Hodgkin's disease.

SECTION XX

NEUROLOGICAL DISORDERS

87. Methods of examination.—*a.* In order to detect the presence of certain common neurological diseases, particularly epilepsy, post-encephalitic and post-traumatic syndromes, multiple sclerosis, drug addiction, and hysteria, information regarding the life history of the individual is essential. Therefore, a history will be obtained relative to convulsions, fainting spells, attacks of unconsciousness, routine use of any medicines, hospitalization, severe head injury, and educational and occupational history.

b. The neurological examination will be conducted as follows: The individual will be examined stripped. He will walk a straight line at a brisk pace with his eyes open, stop, and turn around. He will then return in the same manner with his eyes closed, stop, and turn around. Look for spastic, ataxic, incoordinate or limping gait; absence of normal associated movements; deviation to one side or the other; the presence of abnormal involuntary movements; undue difference in performances with the eyes open and closed. The individual will then stand erect, feet together, arms extended in front. Look for unsteadiness and swaying, deviation of one or both of the arms from the assumed position, tremors, or other involuntary movements. With eyes closed he will then touch his nose with the right and then the left index finger. Look for ataxia, tremors, overshooting, particularly at the end of the movement. Examine joint and spine movements and muscle condition. Look for muscular atrophy or pseudo-hypertrophy, muscular weakness, limitation of joint movement, and spine stiffness. As to pupils, look for irregularity, inequality, diminished or absent contraction to light; movements of eyes, facial muscles, and tongue. Look for strabismus, ptosis, sustained nystagmus, tremors of retracted lips, asymmetry, or tremors of face or tongue. Sensation will be examined by pricking lightly each side of the forehead, bridge of nose and chin, across the volar surface of each wrist, and dorsum of each foot. Look for inequality of sensation right and left. If these sensations are abnormal, vibration sense should be tested at ankles and wrists by tuning fork. With the eyes closed, he will run each heel from the opposite knee to the ankle. Test sense of movement of great toes and thumb. Look for diminution or loss of vibration and sense of position, and ataxia. Knee jerks

and plantar reflexes should be tested. When indicated, appropriate laboratory tests and X-ray examinations will be made.

88. General service.—These registrants present—

a. A healthy nervous system as manifested by absence of signs of disease of the brain, spinal cord, cranial and peripheral nerves.

b. Certain variations clearly within physiological limits such as minor tremors.

c. Inconsequential paralyses such as those resulting from poliomyelitis or lesions of the peripheral nerves not likely to interfere with military duties.

89. Limited service.—Individuals with local paralyses such as those due to poliomyelitis or nonprogressive diseases of the peripheral nerves of such degree that they disqualify for general military service but have not interfered with locomotion and have not prevented the individual from successfully following a useful vocation in civil life are acceptable for limited service.

90. Nonacceptable.—Any serious neurological disorders such as—

a. Neurosyphilis of any form (general paresis, tabes dorsalis, meningovascular syphilis).

b. Degenerative disorders (multiple sclerosis, encephomyelitis, cerebellar and Friedreich's ataxia, athetoses, Huntington's chorea, muscular atrophies, and dystrophies of any type; cerebral arteriosclerosis).

c. Residuals of infection (moderate and severe residuals of poliomyelitis, meningitis and abscesses, paralysis agitans, post-encephalitic syndromes, Sydenham's chorea).

d. Peripheral nerve disorder (chronic or recurrent neuritis or neuralgia of an intensity which is periodically incapacitating, multiple neuritis, neurofibromatosis).

e. Residuals of trauma (residuals of concussion or severe cerebral trauma, post-traumatic cerebral syndrome, incapacitating severe injuries to peripheral nerves).

f. Paroxysmal convulsive disorders and disturbances of consciousness (grand mal, petit mal, and psychomotor attacks, syncope, narcolepsy, migraine).

g. Miscellaneous disorders (tics, spasmodic torticollis, spasms, brain and spinal cord tumors, operated and unoperated cerebro-vascular disease, congenital malformations including spina bifida if associated with neurological manifestations and meningocele even if uncomplicated, Meniere's disease).

91. Diagnostic criteria.—The following brief summary of diagnostic criteria is intended as a general guide for examiners. It includes the common manifestations of the more usual neurological disorders, but it is not intended to cover all diagnostic criteria or all neurological disorders.

a. Syphilis of central nervous system.—(1) *General paresis or meningoencephalitic syphilis.*—Look for unequal, irregular, or sluggishly reacting pupils or Argyll-Robertson pupil; facial tremor; speech defect in test phrases and in the slurring and distortion of words in conversation; writing defects, consisting of omissions and distortions of letters; defective memory; discrepancies in relating facts of life; inability to perform quickly and accurately simple problems of addition and subtraction in mental arithmetic. Knee jerks may be normal or overactive or underactive. The mood may be apathetic, depressed or euphoric; other psychiatric symptoms may be of a schizophrenic or neurasthenic type.

(2) *Meningo-vascular or cerebrospinal syphilis.*—The prominent diagnostic signs and symptoms are headaches, history of mood changes or convulsions, varying deep and superficial reflexes, pupillary changes, ptosis, ocular palsies, and facial paresis. The mental state is normal, dull, or apathetic. Motor weakness may occur on one side of the body or in one extremity.

(3) *Tabes dorsalis (locomotor ataxia).*—Look for unequal, irregular, or sluggishly reacting pupils or Argyll-Robertson pupil; absent knee jerks; positive

Romberg; ataxic gait, especially when the eyes are closed; hypotonia; and anesthetic areas of the skin. The history, usually of slow progression, may show failing sexual power or sphincter disturbances and pains in the legs or back, usually an irregular series of short, identical attacks of pain coming at intervals.

b. Multiple sclerosis.—A history of transitory weakness, numbness, ataxia of one or more extremities, transient diplopia, scotomata or bladder disturbances should arouse a suspicion of multiple sclerosis. The presence of optic atrophy, scotomata, definite nystagmus, corneal hypoesthesia, absence or irregularity of abdominal reflexes, exaggerated deep reflexes, a Babinski or similar signs, or ataxia and euphoria are common manifestations.

c. Muscular dystrophies.—There is atrophy of the muscles in some forms, hypertrophy in others, and, in general, decrease or loss of muscle power. In the pseudohypertrophic form some muscles are atrophied, others hypertrophied. In myasthenia gravis there is rapid fatigue of muscle power, appearing first in the facial and extrinsic eye muscles and later becoming generalized.

d. Athetosis, dystonia, torticollis, chronic chorea.—These are names given to various types of irregular, intermittent, involuntary movements, affecting various parts of the body, often associated with evidence of spastic paralysis. Simulation is possible and in doubtful cases previous medical records should be sought. Even mild manifestations disqualify.

e. *Paralysis agitans.*—Paralysis agitans is recognized by frozen facies, unwinking stare, rigidity of the muscles, stooped posture, slowness of movement, tremors, slow, monotonous speech, and typical gait. It may be unilateral. A history of encephalitis or influenza is obtained in only about one-half the cases. Even mild manifestations disqualify.

f. Multiple neuritis.—This may be associated with the dietary deficiencies, infection, or intoxication. The symptoms depend upon the cause and duration. They consist of pain, various combinations of diminution or loss of motor power most marked in the distal part of the extremities, sensory diminution or loss, tenderness of the muscles and nerves, loss or diminution of reflexes.

g. Chronic neuralgias.—A history of severe constant or recurrent pain, confined to the area of distribution of a single nerve or segment, without objective changes, suggests this diagnosis. Clearly defined entities are sciatic and trigeminal neuralgias. Less common are suboccipital, brachial and glossopharyngeal neuralgias. Neuralgias of other nerves are extremely rare and the diagnosis will be made with extreme caution. Neuritis, arthritis, bursitis, sinusitis, and also hysteria and malingering must be considered in differential diagnosis. Evidence of previous treatment and the injection of procaine into the nerve presumably affected are important diagnostic aids.

h. Post-traumatic cerebral syndrome.—A history of head injury followed by headache, dizziness, loss of initiative or change of personality is suggestive; but independent confirmation of such alterations should be sought if possible. A dull, apathetic expression, slight nystagmus, fine tremors, vasomotor changes, or abnormal sweating, are confirmatory evidence. If the syndrome is definite, even though mild, the individual should be rejected. The presence of signs indicating a focal lesion, even though mild, is also cause for rejection.

i. Paroxysmal convulsive disorders.—Look for deep scars on tongue, face, and head. Since no physical findings are pathognomonic, it is necessary to discover if the individual has had spells of unconsciousness, convulsions, "fits," "falling out," "spells," "lapses," "dizziness," or "fainting." The individual will be disqualified on a verified history of such spells or of multiple attacks of loss of consciousness, especially with incontinence or twitching, or of frequent momentary episodes of being dazed, or of uncontrollable outbursts of rage or irrational con-

duct, or fugues or treatment with anticonvulsive drugs over a long period of time. Such a history will be verified, if practicable, by a confirmatory medical record from a trustworthy source. The electroencephalograph is of great assistance in diagnosis, particularly in doubtful cases, but will not be used routinely. When a registrant is rejected for epilepsy a statement will be made by the examining board giving the basis for the diagnosis. When the diagnosis is based wholly on the registrant's statement, in the absence of stigmata or a verified history, it will be so stated. It should be remembered that the epileptic may attempt to conceal his defect in order to gain entrance to the military service.

j. Cerebral vascular accidents.—Characteristically, the onset is acute, with or without unconsciousness. Almost any focal disturbance may result. Evidence of peripheral arterial disease may be inconspicuous. The diagnosis disqualifies.

Section XXI

PSYCHOSES, PSYCHONEUROSES, PERSONALITY DISORDERS

92. General considerations.—The detection of disorders of the personality is often most difficult and the general fitness of the individual for military life should be considered at the end of the medical investigation. The key to the proper evaluation of each individual is the knowledge that military life is rigorous and makes special demands on the individual. To be effective, a man must have the capacity for sustained duty in the face of separation from home, regimentation, lack of privacy, extremes of climate, hunger, exhaustion, and the threat of bodily injury, and should be judged with this in mind. Since experience has shown that mentally defective and unstable individuals form weak points in the military organization and often break down under stress, endangering the lives of others, as well as the national security, they will not be accepted. Each examiner will constantly be on the alert throughout his contact with the individual to detect any sign of such disorders and will promptly report suspicious symptoms he may note to the chief examiner. (See par. 2*b*.)

93. Routine procedure.—*a.* The diagnosis of most psychiatric disorders depends in the first place upon the examiner's estimate of the person's behavior and response to the situation of the examination and in the second place upon an adequate history, supplemented if necessary by information gathered from the individual's own physician, courts, hospitals, social service, or welfare agencies, etc.

b. Attention will be given to whether the individual wants to be in the Army and thus may have a tendency to minimize his defects or whether he wants to remain in civilian life and thus may have a tendency to exaggerate.

c. Routinely, examiners will be on the watch for any of the following personality deviations: Inability to understand and execute commands promptly and adequately, abnormal negativistic attitude, abnormal anxiety, silly inappropriate laughter, instability, seclusiveness, sulkiness, sluggishness, discontent, lonesomeness, depression, shyness, suspicion, overboisterousness, timidity, personal uncleanliness, stupidity, dullness, resentfulness to discipline, a history of nocturnal incontinence, sleeplessness, lack of initiative and ambition, sleepwalking, recognized queerness, suicidal tendencies either bona fide or feigned, and homosexual proclivities.

d. Abnormal autonomic responses (fainting, blushing, excessive sweating, shivering or gooseflesh, excessive pallor or cyanosis of the extremities) are also occasionally significant. Note also the lack of such normal anxiety or autonomic responses as might reasonably be expected under the circumstances.

94. Minimum psychiatric examination.—*a.* Mental and personality difficulties are most clearly revealed in the subject's behavior toward those with whom he feels relatively at ease. The most successful approach is often one of straightforward professional inquiry coupled with real respect for the individual's personality and due consideration for his feelings—which does not mean diffidence.

b. The psychiatric examination will be made outside of easy hearing of other men. Matter of diagnostic significance is often concealed when the individual feels that he must be impersonal and give replies that will not impress listeners with his peculiarity.

c. Questioning will begin with something that is obviously relevant to the immediate situation. One tries to elicit the difficulties which the individual has been experiencing in his relations with others and himself in his work and in his spare-time activities. The examiner pays close attention to content and implication of everything said and to any other clues and, in a matter-of-fact manner, follow up whatever is not self-evidently commonplace.

d. The probable presence of some types of psychiatric disorders—in particular the major psychoses and marked degree of feeble-mindedness—may often be suspected by alert observation of the individual's behavior if the examiner knows what to look for and what to regard as significant. In other cases one would not be able to suspect the presence of any morbid condition without some knowledge of the individual's history.

95. General service.—*a.* The range of personalities usually classed as "normal".—Evidence of ability to get along tolerably with family, friends, casual acquaintances, authorities in school or society, employers, and fellow workers. Conventional attitude toward sexual problems. Sufficient intelligence to graduate from grammar school unless prevented by external circumstances. Sufficient stability and ability to obtain and keep, or at least to seek, a job.

b. Marginal intelligence, if compensated for by better than average stability.

c. Men whose speech can readily be understood, even though there is a moderate degree of stuttering or stammering, if otherwise physically, intellectually, and emotionally fit.

96. Limited service.—*a.* Stuttering and stammering of a degree disqualifying for general military service but which has not prevented the man from successfully following a useful vocation in civil life.

97. Nonacceptable.—Individuals who are found to have any serious mental or neurological disorder such as—

a. Mental deficiency.

b. Psychosis.

c. Psychoneurosis.

d. Psychopathic personality.

e. Alcoholism and drug addiction.

f. Primary behavior disorder of sufficient degree to indicate predisposition to more serious disorders.

g. Syphilis of the central nervous system.

98. Diagnostic criteria.—*a. Mental deficiency.*—(1) Manifested by lack of general information concerning native environment; inability to learn, to reason, to calculate, to plan, to construct, and to compare weights; defect in judgment, foresight, language, output of effort; suggestibility, untidiness, lack of personal cleanliness, anatomical stigmata of degeneration, muscular awkwardness. His-

tory of school life, vocational career, and disciplinary report will assist materially.

(2) Examiners will use extreme care and judgment in reporting their findings on enlistment records. Such terms as "imbecile" and "moron" will not be used. Elaborate psychometric estimation is not necessary. Intelligence cannot be definitely estimated and there is no test that is infallible. They are all only approximations and must be evaluated only in conjunction with accompanying factors and circumstances. A diagnosis of mental deficiency will be based on results of objective tests interpreted in the light of the above considerations. Illiteracy *per se* is not to be classified as mental deficiency.

b. Psychosis.—(1) *Schizophrenia* (*Dementia Praecox*).—This mental disorder is manifested by obscurely motivated peculiarities of behavior and thought. Of these, the so-called hebephrenic type is the most obvious. More difficult to identify is the simple type. These are the numerous shiftless, untidy, perhaps morose, sometimes nomadic individuals who have had what was regarded as a normal childhood. Somewhere between the ages of 12 and 25 they underwent a change, acute or insidious, with dilapidation of their social interests and the habits in which they had been trained. They may or may not have received treatment in hospitals for mental disease. The paranoid type is another large division. These persons cling to fantastic beliefs in their overwhelming importance, and often feel that people are persecuting them or otherwise interfering with their career or well-being. Some of them believe that they are in communion with supernatural beings. Others believe that they are victims of plots, secret organizations, spy rings, or religious or fraternal groups. They are often plausible in supporting these delusions by clever misinterpretation of facts. Some of them are very evasive and skillful at concealing the pattern of their disorder. A morbid suspiciousness of anyone who takes an interest in them is frequent. They may become tense and hateful when interrogated. An attitude of unusual cautiousness or suspiciousness toward the examining physician or toward fellow individuals should suggest the possibility that the individual may be paranoid. The catatonic states present great difficulty in diagnosis. Perhaps the only sign of these conditions is the impression of queerness which the person makes on anyone who seeks to get acquainted with him. The actual oddities of behavior or thought may be subtle; it may be difficult, in retrospect, to point to any particular instances of the unusual. The most striking signs of these conditions may in fact come out in connection with the physical examination. The physician, at some state of the physical examination, may observe a peculiar reaction which upon questioning may awaken a suspicion of a prepsychotic state. These individuals frequently entertain unfounded convictions as to bodily peculiarities or disorders which they attribute to excessive sexual acts of one sort or another. These beliefs, sometimes hard to elicit, are often medically incredible and bizarre. Questioning them on intimate personal matters often leads to great embarrassment, confused speech, or actual blocking of thought, so that they do not know what to say. Get history of family life and of school, vocational, and personal career.

(2) *Manic-depressive Psychosis.*—Major abnormalities of mood are shown by episodes of unreasonable elation or depression which have tended to recur without obvious connection with events. People who are known to be so mercurial in their reactions that their judgment is seriously impaired during the up or down swing of their moods will be rejected. Individuals known to have received medical or nursing care because of a morbid excitement or a depression will be rejected.

(3) *Psychosis* of other types, involutional melancholia, toxic psychosis, paranoia, are encountered rarely at induction and will be rejected.

(4) Reliable history of commitment to a mental hospital will be cause for rejection.

c. Psychoneurosis.—Individuals suffering from acute psychoneurosis at the time of examination or with evidence of chronic psychoneurosis (neurotic personality) are to be rejected. These individuals react inappropriately to difficulty. They may have done well in civilian life but tend to be anxious, self-conscious, oversensitive, and emotionally dependent on other people. In evaluating the signs and symptoms, particularly the psychosomatic phenomena, it is important to keep in mind that sometimes they may be transient reactions to the examination and concern over the likelihood of induction and army service. Important factors in the diagnosis of a clinical psychoneurosis are a definite history of previous psychoneurotic episodes and/or the persistence of psychoneurotic reactions, which were, at least, in some degree disabling to the individual in his civilian life.

(1) Signs and symptoms fall into the following types—

(*a*) Anxiety, manifested by subjective and objective evidence of apprehension and worry.

(*b*) Neurasthenia, excessive concern with minor or functional bodily ailments as manifested by multiple vague complaints, multiple operations for obscure disorders, unusual fatigability, vague pains, pressure feelings, distorted head sensations; excessive concern over health and function of bodily organs.

(*c*) Hysteria, conversion symptoms such as hysterical fits, deafness, blindness, or loss of voice; hysterical paralyses or anesthesias; dissociations such as amnesia, absences, trances.

(*d*) Psychasthenia, obsessions, compulsions, phobic manifestations such as specific terrors of harmless objects or situations, food phobias, dirt and germ phobias, inflexibile rituals of behavior about food, sleeping, dressing, compulsive acts, obsessional thoughts, and obsessional indecision.

(*e*) A Reactive Depression is a depression, which may be severe and with suicidal trends and which is a reaction to adverse and serious environmental situations. It persists for fairly long periods of time and is definitely more than a "blue spell." The patent is apt correctly to regard the disturbing environmental situation as responsible for the depression.

(*f*) Mixed types.

(2) *Physical disorders which may furnish important clues to psychoneurotic disabilities.*—Neurotic tensions may be manifested not only by frank psychoneuroses and behavior difficulties but also by manifestations of a variety of physical disturbances and organic disease processes. Such conditions as peptic ulcer, pylorospasm, mucous colitis, spastic constipation, neurocirculatory asthenia, paroxysmal tachycardia, vascular hypertension and hypotension, Raynaud's disease, fainting, convulsions, somnambulism, narcolepsy, migraine, glaucoma, eczema, psoriasis, enuresis, cardiospasm, impotency, and asthenia may have important emotional components and may therefore furnish important clues to the neurotic aspects of the individual. The presence of such conditions, if not in themselves disqualifying, should always lead to further study. Look for a close relationship.

d. Psychopathic Personalities.—In this ill-defined, more or less heterogeneous group are placed those individuals who, although not suffering from a congenital defect in the intellectual sphere, do manifest a definite defect in their

ability to profit by experience. They are unable to proceed through life with any definite pattern of standardized activity. They are unable to respond in an adult social manner to the demands of honesty, truthfulness, decency, and consideration of their fellow associates. They are emotionally unstable, not to be depended upon; act impulsively with poor judgment; are always in difficulties, have many and various schemes without logical basis, lack tenacity of purpose, are easily influenced, and oftentimes in conflict with the law. They do not take kindly to regimentation and are continually at variance with those who attempt to indoctrinate them in the essentials of military discipline. Such an individual has a decided influence upon his fellow associates and the morale of his organization, for he will not conform himself to organized authority and he derives much satisfaction in cultivating insubordination in others. Quite frequently he presents a favorable impression, is neat in appearance, talks well, and is well mannered. However, under this veneer the real defect is evident by past irresponsiveness to social demands and lack of continuity of purpose. Among this general group are three main types:

(1) Psychopathic personality with pathologic sexuality. This may include many homosexuals and cases of sexual perversion. Persons habitually or occasionally engaged in homosexual or other perverse sexual practices are unsuitable for military service and will be excluded. Feminine bodily characteristics, effeminacy in dress or manner, or a patulous rectum are not consistently found in such persons, but where present should lead to careful psychiatric examination. If the individual admits or claims homosexuality or other sexual perversion, he will be referred to his local board for further psychiatric and social investigation. If an individual has a record as a pervert he will be rejected.

(2) Psychopathic personality with emotional instability. This includes the inadequate personalities. Those individuals who do not show the patterns of psychoneurosis or psychosis but do not have personality traits which enable them to make a satisfactory adjustment owing to introversion, eccentricity, impracticalness, or vagrancy.

(3) Psychopathic personality with asocial and amoral trends. This includes the grotesque and pathological liars, petty offenders, swindlers, kleptomaniacs, pyromaniacs, alcoholics, and likewise those highly irritable and arrogant individuals, so-called "guardhouse lawyers," who are forever critical of organized authority and imbued with feeling of abuse and lack of consideration for their fellow men.

(4) All such men should be excluded from the service as far as possible, both because of the difficulties which these symptoms themselves cause and because of the fact that these individuals are predisposed to psychoneurotic and psychotic states.

e. Chronic alcoholism and drug addiction.—(1) *Chronic alcoholism.*—An individual will be regarded as a chronic alcoholic if he habitually uses alcohol to the point of social or physical disablement, as evidenced by loss of job, repeated arrests, or hospital treatment because of alcoholism. Such a history, if obtained, should be verified. Look for suffused eyes, prominent superficial blood vessels of nose and cheek, flabby bloated face, red or pale purplish discoloration of mucous membrane of pharynx and palate; muscular tremor in the protruded tongue and extended fingers, tremulous handwriting, emotionalism, prevarication, suspicion, auditory or visual hallucinations, persecutory ideas.

(2) *Drug addiction.*—An individual will be regarded as a drug addict if he is or has recently been a habitual user of any of the opium preparations, cocaine, or cannabis indica (marijuana). A history of arrests for narcotic law violation

is important; recent needle marks are suggestive; discolorations along the line of blood vessels on the arms, or scars from needle abscesses on the arms, shoulders, buttocks, or thighs are very important evidence but are not always present. The condition of the pupils is not important in active addicts.

f. Primary behavior disorders.—These may or may not be cause for rejection, depending upon their severity. They are causes for rejection either because they indicate predisposition to more serious mental disorder or because the symptom itself interferes with military efficiency. These disorders fall into the following groups:

(1) *Simple adult maladjustment.*—These individuals show evidence of tension and anxiety not serious enough to be classified as psychoneurosis and clearly caused by situational difficulties.

(2) *Neurotic traits.*—Tics, habit spasms, somnambulism, overactivity, fears either present at time of examination or in the individual's history, though not in themselves disabling may indicate predisposition to serious mental disorder on exposure to stress.

(3) *Enuresis.*—This is a cause for rejection if of sufficient degree to cause sanitary difficulties for men living in close quarters. History of bed-wetting since childhood may indicate predisposition to psychiatric disorder. A verified history will be obtained. See Sect. XXIV, Par. 111.

(4) *Emotional immaturity.*—Certain individuals have no defect of personality but are too inexperienced or too dependent on family ties to function effectively in the armed forces.

(5) *Stammering and stuttering* are cause for rejection if of such a degree that registrant is unable to express himself clearly or to repeat commands.

Section XXII

INTELLIGENCE

99. General considerations.—Minimum intelligence requirements for military service are prescribed to insure that only men capable of absorbing training within reasonable limits of time will be inducted. Factors of intelligence measured by prescribed Army tests are not necessarily those measured by other tests of intelligence; therefore, intelligence tests other than authorized Army tests will not be used. Concepts such as *mental age* and *intelligence quotient* are not applicable to results achieved on Army Tests, and will not be used to describe the mental level of individuals being tested. Further, since intelligence, rather than education, is the criterion used to determine the trainability of an individual, references to the educational level attained by an individual are irrelevant when used to describe the level of intelligence.

100. General service.—Individuals who are graduates of standard English-speaking high schools are acceptable. Individuals who are not graduates of standard English-speaking high schools will be given prescribed objective tests of intelligence. A man achieving the critical score or a higher score on one or more of the authorized tests is acceptable for induction.

101. Limited service.—There are no intelligence criteria to warrant initial selection for limited service.

102. Nonacceptable.—Failure of a nongraduate of a standard English-speaking high school to achieve a score on one or more of the prescribed tests equal to or higher than the critical score will be accepted as evidence of low intelligence. Such persons are nonacceptable.

Section XXIII

PURPOSELY CAUSED PHYSICAL DEFECTS

103. Report of apparently purposely caused defects.—Whenever it appears to an examining physician that an individual is suffering from self-inflicted or purposely caused physical defects which under the standards of physical examination prescribed herein would render him disqualified for military service of any kind, a full statement of the facts and of the condition of the individual and of the examining physician's recommendation will be prepared and submitted to the Director of Selective Service.

Section XXIV

MALINGERING

104. Definition.—The malingerer is one whose complaints of bodily disorders and whose behavior or acts are in simulation of some physical or mental disease for the definite purpose of attaining a particular end which is more satisfactory to him or of seeking an escape from a fear-infested situation. Malingering is encountered in a number of situations but most frequently during the preliminary examinations and early training periods of military service. The simulation of neuroses and of physical disorders includes a wide variety of problems which must be differentiated from the ordinary neuroses as well as from physical illnesses; however, simulation is always in keeping with the extent of the knowledge possessed by the individual regarding the particular disorder from which he pretends to suffer and therefore constantly changes its methods and its maladies. A person gifted with histrionic talent and who has a considerable degree of knowledge and skill at his command may be able to simulate physical or mental conditions to such perfection that physicians may sometimes be deceived.

105. Differentiation.—*a.* For a disorder to be classed as *true* malingering, it must fulfill three conditions that—

(1) No obvious or frank disease or personality disorder is present.

(2) The individual is consciously aware of what he is doing and of the motive responsible for his attitude.

(3) He is fixed in carrying out a purpoose to a preconceived result.

b. When confronted with a case of malingering the observer will try to ascertain how much of what constitutes the total picture is well acted drama and consciously done and how much is true in part and more or less unconscious. For practical purposes these reactions may be divided into the following:

(1) Malingering for the purpose of attaining a definite end by simulation of a disease by one who has no past history of similar patterns of reaction but who is making an attempt to escape in an emergency (temporary reaction); one who feigns his symptoms as a bluff and hopes to get away with it.

(2) Malingering to the extent of exaggerating or "capitalizing" conditions or symptoms that are present for the purpose of avoiding service. This includes an enlargement on minor physical ailments or on relatively insignificant diseases, emphasizing mild personality problems or neuroses, and overemphasis on symptoms of fatigue, etc.

(3) Malingering as a manifestation of a psychopathic personality with a suggestion or definite history of previous psychopathic behavior. In intelligence the psychopath may be retarded, of average endowment, or superior but he is incapable of adjustment under ordinary life conditions. The ranks of psychopathic personality contain many persons having an irresistible tendency to alcoholism, drug addiction, sex perversion, and criminality, including numbers of cranks, extremists, eccentrics, hobos, and queer social misfits.

(4) The psychoneurotic suffering with hysteria, who believes in the reality of a disability which on the surface appears to be a definite simulation, requires a special investigation. The confusion of hysteria with true malingering is not infrequently made by those who consider nearly all hysterics as malingerers with symptoms that could be controlled voluntarily. Some of these psychoneurotics exaggerate more or less unconsciously their symptoms to gain their ends, thus emphasizing the questions of how much is neurosis, how much is simulation, and how much is associated with a change in personality.

(5) Malingering or reactions considered to be malingering may appear in those basically psychoneurotic, insecure, and apprehensive, or physically ill as well as in those suffering from psychoses, epilepsy, and organic brain disorders where there has been a definite change in personality. These reactions frequently confused with pure malingering may become much worse during investigation or attempted correction.

c. Among these five groups the typical members are readily distinguished but intermediate and doubtful cases which resist differentiation do occur. It should be kept in mind that it is even more difficult for a healthy person to feign disease than it is for a diseased person to simulate health and that a malingerer may be able to simulate and to accentuate single symptoms but he is practically always unable to feign the entire picture of the disease he has selected and thus the expert can usually detect omissions, discrepancies, and contradictions in the situation.

106. Feigned medical diseases.—*a.* The detection and management of malingerers simulating medical diseases depend upon the absence of positive findings in an individual who presents the general characteristics of the malingerer. There is especial need for the physical examination to be thorough in this group. Some of the cardiac cases at first regarded as malingerers may later be found to have mitral stenosis or bacterial endocarditis. Similarly, proper tests may show the existence of peptic ulcer in those suspected of feigning digestive abnormalities. The estimation of the reality of rheumatic pains is always a difficult matter.

b. Tachycardia and thyrotoxicosis may be temporarily induced by ingestion of drugs such as thyroid extract. Egg albumin or sugar may be added to urine. Canned milk may be utilized to simulate urethral discharge. Cantharides may be taken to cause albuminuria. Digitalis and strophanthus may be taken to cause abnormal heart findings. The skin may be irritated by various substances. Cathartics may be taken to bring about purging or to simulate a chronic diarrhea. An appearance of hemoptysis may be produced by adding blood, either human

or that of animals, to the sputa. Sometimes merely coloring matter is added. Those who can vomit voluntarily what they swallow use the same means to create the appearance of hematameses. Similarly, coloring matter may be added to the stools. Mechanical and chemical irritants may be used to cause inflammation about practically all the body orifices. Jaundice may be simulated by taking picric acid. Artificial jaundice is recognized by demonstration of picric acid in the urine.

107. Feigned surgical conditions.—Under this are included old scars and injuries of the bones, fractures, and orthopedic conditions. Others may shoot or cut off their fingers or toes, usually on the right side, to disqualify themselves for service. Some may put their hands under cars for this purpose. Retention of urine may be simulated. Substances may be injected under the skin to create abscesses. Crutches, braces, strappings, or trusses may be used to give the appearance of disability. Wounds are rarely self-inflicted when witnesses are present; consequently it is almost impossible to be certain of malingering in some cases.

108. Feigned nervous or mental illness.—*a. Psychosis.*—Rarely feigned by individuals and then usually a silly, foolish type. In case of doubt, hospital observation is necessary, with verification of past records. Mental deficiency is frequently feigned especially by illiterates.

b. Pain and hyperesthesia.—The most frequent of all complaints. History inconsistent, ordinary indications of suffering absent. Absence of other symptoms usually accompanies types of pain of which complaint is made. Absence of objective evidence of localized pains. Note behavior when the registrant believes himself unobserved.

c. Anesthesia.—Complaint of anesthesia itself creates a suspicion of malingering, as most patients with anesthesia are ignorant of it.

d. Epilepsy.—Men who have sustained head injury may claim fits. These complaints may be in reference to grand mal or petit mal. Petit mal attacks are spoken of as fainting attacks. In grand mal attacks there is loss of pupil response to light, knee jerks are lost, and the Babinski reflex may be present.

e. Hysteria.—Not feigned in itself, but its existence creates confusion as to malingering. The question to be decided is whether the individual is too seriously affected with the neurosis to be useful as a soldier.

f. Stiff back.—Stiff back is a frequent symptom of hysteria in mobilization among selected men. In cases of this kind organic disease of the vertebrae can and will be excluded, if necessary by X-ray.

109. Simulated defects of vision.—See section IV.

110. Simulated defects of hearing.—See section V.

111. Bed wetting.—Bona fide enuresis substantiated by a physician's affidavit or other acceptable documentary evidence is cause for unconditional rejection. (See paragraph 98 *f* (3).)

112. General considerations.—*a.* All men suspected of malingering will be immediately subjected to a thorough psychiatric survey which will include a careful history of their previous behavior and adjustment record and a complete physical, neurological, and laboratory evaluation. Observation in hospital may be required. Suspected malingerers found suffering from definite psychoneuroses and others in whom signs of mental disorders are detected will be rejected for military service.

b. Whenever it appears to an examining physician that an individual is endeavoring to escape service by malingering, if otherwise mentally and physically fit, he will be accepted.

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